



WESTERN NEVADA COLLEGE

# ACADEMIC PROGRAM GUIDE

## 2009-2010



# How to use the **ACADEMIC PROGRAM GUIDE**

Western Nevada College is pleased to provide this booklet to help you determine your college program of study. You will find detailed information about the college's academic degrees and programs. The WNC 2009-2010 Catalog is online:

**www.wnc.edu/catalog**  
including detailed information about:  
**College Calendars**  
**Course Descriptions**  
**Enrollment and Records**  
**Faculty and Administration**  
**Fees & Costs**  
**Financial Assistance**  
**Policies & Procedures**  
**Rules & Sanctions**  
**Student Activities**  
**Student Services**

## INFORMATION

Contact WNC campuses or teaching centers:

**Carson City – 775-445-3000**  
**Douglas – 775-782-2413**  
**Fallon – 775-423-7565**  
**Fernley – 775-575-3348**  
**Hawthorne – 775-945-2405**  
**Lovelock – 775-273-4994**  
**Smith Valley – 775-465-2332**  
**Yerington – 775-463-2412**

## Go to College & Skip the Commute!

### WNC Offers Six Online Degrees/Certificates

### Busy Lives. Hectic Schedules. High Gas Prices.

For many students, earning a college degree online is the best solution. Western Nevada College offers five associate degrees and one certificate of achievement online, providing affordable access to higher education for students of all ages, no matter where they live or work. Some students choose to complete a degree using a variety of learning modes, including on-campus, interactive video and online classes. See a WNC counselor to choose the schedule that works best.

### ONLINE DEGREES/CERTIFICATES

Associate of Applied Science in Accounting  
Associate of Applied Science in General Business  
Associate of Applied Science in Management  
Associate of Arts (general)  
Associate of General Studies  
Certificate of Achievement in Bookkeeping

## ACADEMIC PROGRAM GUIDE - VOLUME 6 • JULY 2009

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**FRONT COVER- TOP:** (l-r) Steve Ott & Wes Dietlein in geology class.  
**MIDDLE:** (l-r) Student employee awardees Sergio Arteaga and Marlene Purcell.  
**BOTTOM:** Grads; (l-r) Tabitha Grasso, Marlyn Sexton, Shanna & Cory Daggett and Lindsay Dugas; Softball player Devin Steelman slides into home base.

**BACK COVER- TOP:** Anatomy and Physiology students Vanessa McGregor and Jeanette McGinley. **MIDDLE:** (l-r) Student employee awardees Justin McMenomy and Robyn Dulco (l). **BOTTOM:** (l-r) Baseball team at flag salute; Rosette Moltz (l) with Rosalba Cadena de Armas.



## Academic Programs

Western Nevada College offers academic degrees and academic programs to meet a variety of educational goals. Some students wish to learn occupational skills or work toward career advancement. Others seek credits which will transfer to a four-year college or university.

A number of one-year certificates are also offered in occupational areas. Students are encouraged to read the specific information about each degree or certificate before making their decisions. Counselors and faculty advisors are also available to provide information on the programs available. See web site: [www.wnc.edu/academics/](http://www.wnc.edu/academics/)

*The college now offers a bachelor's degree in the following area:*

- **Bachelor of Technology in Construction Management**

*Western offers four types of associate degrees in dozens of diverse academic areas. They include:*

- **Associate of Applied Science**
- **Associate of General Studies**
- **Associate of Arts**
- **Associate of Science**

### OCCUPATIONAL PROGRAMS AND EMPHASES

WNC offers two-year occupational programs in many areas, allowing students to gain job training and earn an Associate of Applied Science degree.

A new Bachelor of Technology degree in Construction Management helps students can climb a career ladder from learning basic construction skills all the way to becoming a construction manager.

One-year occupational programs are also offered in a number of areas, allowing students to achieve a Certificate of Achievement.

Students enrolled in any of these programs will benefit from "hands-on" laboratory experience within their major field. They will enter the job market with specific skills and knowledge useful for employment and advancement.

### TRANSFER PROGRAMS AND EMPHASES

WNC attracts a large number of students who plan to earn a baccalaureate degree from another four-year college or university. They elect to begin their college education at the community college for many reasons, including lower tuition costs, small class sizes, flexible class times and a comfortable learning environment.

Students who plan to transfer can earn the Associate of Arts, Associate of Science, or Associate of General Studies degree. These programs of study can provide the first one or two years of their four-year degrees.

WNC students have transferred to many four-year schools. Students who plan to transfer should work closely with a WNC counselor and also keep in contact with the intended transfer institution.

## General Education Mission & Student Learning Outcomes

The general education program is an essential element of all degree programs and certificates of achievement offered at WNC. Faculty completed a review of the purpose of the general education program and developed a list of the ten student learning outcomes that are

critical to the success of WNC graduates. All courses used to fulfill general education requirements should specify the specific general education student learning outcomes that are relevant to the course.

#### GENERAL EDUCATION - Mission & Outcomes

**Mission:** The mission of general education at WNC is to provide students who complete degrees and certificates of achievement with critical life skills that will benefit them in their personal and professional endeavors.

**Student Learning Outcomes:** Students who complete a degree at WNC are expected to demonstrate they:

- have college-level skills in reading, writing, and oral communication appropriate to their degree and/or emphasis.
- can use appropriate college-level mathematical skills.
- have problem solving, creative, and critical thinking skills.
- have effective and efficient learning skills, including the location and evaluation of information.
- have appropriate technological skills, including computer skills.
- know the basic principles and processes of government at the local, state, national and international levels.
- understand the methods of science and the role of science and technology in the modern world.
- understand and apply social science principles, including an appreciation of participation in civic affairs.
- have an understanding of fine arts or performing arts.
- understand the importance of cultural traditions, diversity, and ethics in the modern world.

Students completing a certificate of achievement at WNC are expected to demonstrate they:

- have the appropriate communication, computational, and human relations skills.



WESTERN NEVADA COLLEGE • 2009-2010  
**Academic Programs & Degrees**

	Online Degree	Bachelor of Technology Degree	Associate of Applied Science Degree	Associate of Arts Degree★	Associate of Science Degree	Certificate of Achievement	Transfer Program Courses*	Certification Preparation
Accounting ( <i>Business Emphasis</i> )	★		X				X	
American Sign Language						X	X	
Automotive Mechanics			X			X		X
Biological Sciences ( <i>Associate of Science Emphasis</i> )					X		X	
Bookkeeping	★					X		X
Business	★		X			X	X	
Chemistry ( <i>Associate of Science Emphasis</i> )					X		X	
Computer Applications						X		
Computer and Office Technology			X				X	
Computer Science ( <i>Associate of Science Emphasis</i> )					X			
Computer Technology - Computer Networking Technology			X					X
Computer Technology - Information Technology			X					
Computer Technology - Network Support Technician						X		X
Computer Technology - System Administration Technician						X		X
Construction Technology								X
Construction Technology - Construction Management		X						
Construction Technology - Project Management			X					
Criminal Justice - ( <i>Associate of Arts &amp; Applied Science</i> )			X	X			X	X
Criminal Justice - Law Enforcement/Academy ( <i>Criminal Justice Emphasis</i> )			X			X		X
Criminal Justice - 9-1-1 Dispatch Telecommunications						X		
Customer Service						X		
Deaf Studies ( <i>Associate of Arts Emphasis</i> )				X			X	
Desktop Publishing						X		
Drafting Technology - Architectural ( <i>Drafting Technology Emphasis</i> )			X			X	X	
Drafting Technology - Civil ( <i>Drafting Technology Emphasis</i> )			X				X	
Drafting Technology - Mechanical ( <i>Drafting Technology Emphasis</i> )			X			X	X	
Early Childhood Education			X			X	X	
Education							X	
Engineering Science ( <i>Associate of Science Emphasis</i> )					X		X	
Fine Arts ( <i>Associate of Arts Emphasis</i> )				X			X	
Geographic Information Systems			X			X	X	
Geosciences ( <i>Associate of Science Emphasis</i> )					X		X	
Graphic Communications			X			X	X	
Machine Tool Technology			X			X		
Management ( <i>Business Emphasis</i> )	★		X				X	
Mathematics ( <i>Associate of Science Emphasis</i> )					X		X	
Musical Theatre ( <i>Associate of Arts Emphasis</i> )				X			X	
Nursing			X				X	
Physics ( <i>Associate of Science Emphasis</i> )					X		X	
Real Estate ( <i>Business Emphasis</i> )			X					X
Retail Management						X	X	
Surgical Technology						X		X
Welding Technology			X			X		X

\* Students may take courses in many other academic areas for transfer; see transfer degree section of this catalog and/or a WNC counselor.

★ Degree/certificate available online



# Transfer Degrees

Associate of Arts &amp; Associate of Science

## ASSOCIATE OF ARTS & ASSOCIATE OF SCIENCE DEGREE - Mission & Outcomes

**MISSION** - The purpose of the Associate of Arts and Associate of Science degrees is to provide the academic knowledge and skills for successful transfer to meet higher educational goals.

**STUDENT LEARNING OUTCOMES** - Students who complete either an Associate of Arts or an Associate of Science degree at WNC are expected to demonstrate that they -

- have met the general education student learning outcomes.
- know the subject matter appropriate to the emphasis of the degree.
- can succeed at their transfer institutions.

The Associate of Arts and Associate of Science degrees are primarily for the student who plans to transfer from WNC to a four-year college or university to pursue a baccalaureate degree in liberal arts, sciences, humanities, math or related areas. Every year, large numbers of WNC students successfully transfer to other schools. Each school has its own specific requirements and recommended electives for its various emphases.

Community college students who plan to transfer to the University of Nevada, Reno, University of Nevada, Las Vegas or Nevada State College and who did not complete the university entrance requirements in high school, must complete a minimum of 24 transferable credits with a minimum 2.3 grade point average. Effective fall 2010, the minimum grade point average will increase to 2.5. Students who earn an Associate of Arts or Associate of Science degree will be admitted to an NSHE university or state college regardless of their grade point average.

## TRANSFER PROGRAMS

WNC students may select a course of study which enables them to complete some or all of the lower division requirements for a four-year degree from the list of transfer programs at UNR, UNLV, NSC or other schools.

Recent surveys of WNC students show they have transferred to colleges throughout the country including: UNR; UNLV; Nevada State

College; Southern Utah University; University of New Mexico; Arizona State University; California State University, Sacramento; University of California at Berkeley; Truckee Meadows Community College; University of Phoenix; Cosumnes River College-Los Rios; Lake Tahoe Community College; Great Basin College and Salt Lake Community College.

*Programs and areas of study offered at WNC include:*

- Nevada State College Teacher Education Partnership

Please contact counselors or faculty advisers for major-to-major transfer agreements for the following programs:

Accounting  
Agriculture  
Animal Science  
Anatomy  
Anthropology  
Architecture  
Art  
Astronomy  
Atmospheric Sciences  
Biochemistry  
Biology  
Business  
Chemistry  
Chemical Engineering  
Civil Engineering  
Communication Arts  
Communicative Disorders  
Computer Engineering  
Computer Science  
Criminal Justice  
Dance  
Dental Hygiene  
Pre-Dentistry  
Drama

Early Childhood Education  
Economics  
Education  
Electrical Engineering  
English  
Environmental Science  
Finance  
Fish/Wildlife Management  
Foreign Languages  
General Studies  
Geography  
Geology  
Geological Engineering  
History  
Hotel Administration  
Humanities  
Industrial Arts  
Industrial Education  
Information Systems  
Journalism  
Pre-Law  
Liberal Arts  
Pre-Librarianship

Literature  
Management  
Marketing  
Mathematics  
Pre-Medicine  
Mechanical Engineering  
Metallurgical Engineering  
Meteorology  
Mining Engineering  
Motion Picture and Cinema  
Multicultural (Ethnic) Studies  
Music  
Natural Resources  
Nursing  
Occupational Therapy  
Oceanography  
Pre-Optometry  
Pre-Pharmacy  
Philosophy  
Physician Assistant  
Physical Education  
Pre-Physical Therapy

Physiology  
Physics  
Political Science  
Psychology  
Public Administration  
Public Relations  
Radiologic Technology  
Recreation  
Religious Studies  
Social Science  
Social Welfare/  
Social Work  
Sociology  
Special Education  
Speech Communication  
Theatre Arts  
Urban Planning  
Pre-Veterinary Medicine  
Vocational Education  
Zoology



# Bachelor of Technology

## An Applied Baccalaureate Degree in Construction Management

The Bachelor of Technology degree in Construction Management offers students advanced technical and occupational skills in a formal educational route that will help them progress to supervisory positions within their field. It provides an opportunity for those who have completed an associate degree in an applied technology field to progress academically and earn a bachelor's degree. It also provides an avenue for those already working in a technical field to enroll in an applicable baccalaureate degree

program that will enhance their core and business management skills and offer career advancement opportunities. To learn more about the Bachelor of Technology degree program, please see a WNC counselor. Courses with a number under 100 (such as ENG 95) are not applicable toward a Bachelor of Technology degree at WNC

*Programs and areas of study offered at WNC include:*

- Construction Management

### BACHELOR OF TECHNOLOGY IN CONSTRUCTION MANAGEMENT DEGREE REQUIREMENTS

**REQUIREMENTS:** A minimum of 128 total credits chosen from the following categories:

**CAPSTONE-9 credits.**

*Choose from:*

Communication: 412  
Construction Management: 456  
Economics: 334, 365  
Management: 462, 469

**ENGLISH/COMMUNICATIONS REQUIREMENTS-9-11 credits.**

*Choose from:*

Business: 107, or  
Communication: 113 or 213 or 215  
English: 100 or 101  
English: 102

**FINE ARTS REQUIREMENT-3 credits.**

*Choose from:*

Art: 100, 101, 124, 160, 224, 260, 261  
Dance: 101  
Humanities: 101  
Music: 121, 125  
Music: Ensemble: 101\*  
Theatre: 100, 105, 180

**HUMANITIES REQUIREMENT-3 credits.**

*Choose from:*

Core Humanities: 201, 202  
English: 200, 223, 231, 232, 243, 250, 252, 261, 266, 267, 271, 275  
History: 105, 106, 207, 247  
Philosophy (except for PHIL 102, 105, 114)

**MATHEMATICS AND SCIENCE REQUIREMENTS-15 credits.**

*A minimum of 5 credits in mathematics and 7 credits in science.*

*Choose from:*

**Mathematics**

Mathematics: 126 & 127, 128\*  
Statistics: 152

**Science**

Chemistry: 100, 121  
Environmental Studies: 100  
Geology: 100, 101, 103  
Physics: 100, 151, 180  
\* or higher

**SOCIAL SCIENCES REQUIREMENT-6 credits.**

*3 credits must be an upper division course (300-400 level, see a counselor).*

*Choose from:*

Anthropology: 101, 201, 202, 210, 212  
Core Humanities: 203  
Criminal Justice: 101, 102, 220, 230, 270  
Geography: 106, 200  
History: 101, 102, 111, 217, 295  
Journalism: 101  
Political Science: 103, 105, 108, 208, 231, 295, 299  
Psychology (except for PSY 210)  
Social Work: 220  
Sociology (except for SOC 210)

**U.S. & NEVADA CONSTITUTION REQUIREMENTS-3 or 6 credits.**

*Choose from:*

Core Humanities: 203  
History: 111  
History: 101 & 217  
History: 101 & 102  
Political Science: 103  
History and Political Science Combination (History 101 and Political Science 208)

**CORE AND DEGREE REQUIREMENTS-**

Number of credits required vary by degree.



# Associate of Arts

## A Transfer Degree

The Associate of Arts degree is primarily for students planning to transfer with junior standing to a four-year college or university for a baccalaureate degree. If the University of Nevada, Reno is the intended transfer school, choose ONLY those courses marked with a caret "^" from the list below. Satisfactory completion of an AA degree guarantees completion of the lower division general education requirements at UNR, UNLV or NSC. Students intending to transfer to other schools should see a counselor or follow the catalog of the transfer school.

Courses with a "B" after the course number (such as MATH 100B) and courses with a number under 100 (such as ENG 95) are not applicable toward the Associate of Arts degree. All courses to be counted

toward this degree must be university transferable.

A maximum of six credits of special topics classes in one subject area may apply toward any WNC degree.

*Note: Information on transfer to UNR is based on UNR requirements for the 2008-2009 school year. These requirements may change in subsequent years. See a WNC counselor for the most up-to-date information.*

**Programs and areas of study offered at WNC include:**

- Criminal Justice
- Deaf Studies
- Fine Arts
- Musical Theatre

## ASSOCIATE OF ARTS DEGREE REQUIREMENTS

**REQUIREMENTS:** A minimum of 60 credits

**ENGLISH/COMMUNICATIONS REQUIREMENTS-** 6–8 credits.

WNC and UNR

English: 100^ or 101^, 102^

^ UNR core curriculum transfer courses to choose if intending to transfer to UNR.

**FINE ARTS REQUIREMENT** - 3 credits.

WNC and UNR

Art: 100^, 101\*, 124, 160^, 224, 260^, 261^

Dance: 101^

Humanities: 101^

Music: 121^, 125

Music: Ensemble: 101\*

Theatre: 100^, 105\*, 180^

\* Course may not meet the fine arts requirement at all universities.

Please see a counselor.

^ UNR core curriculum transfer courses to choose if intending to transfer to UNR.

**HUMANITIES REQUIREMENT-**6 credits.

UNR transfer students: choose one course from each UNR group.

UNR: Group A

Core Humanities: 201^

English: 231\*^

History: 105\*^

Philosophy: 200\*^

UNR: Group B

Core Humanities: 202^

English: 232\*^

History: 106\*^

Philosophy: 207\*^

WNC

Core Humanities: 201^, 202^

English: 200, 223, 231^, 232^, 250, 261, 266, 267, 271, 275

History: 105^, 106^, 207, 247

Philosophy (except for PHIL 102, 114)

\* These courses will not fulfill UNR's CH 201 and/or CH 202 requirement, if taken after the student has been admitted and enrolled at UNR.

^ UNR core curriculum transfer courses to choose if intending to transfer to UNR.

**MATHEMATICS REQUIREMENT-**3 credits.

Mathematics: 120^, 126, 126 & 127^, 127, 128^, 176^, 181^, 182, 283, 285

Statistics: 152^

^ UNR core curriculum transfer courses. Choose these courses if you are intending to transfer to UNR.

**SCIENCE REQUIREMENT-**6 credits.

WNC: Choose from Group A and/or Group B. At least one lab science course recommended. UNR: Choose UNR transfer courses and at least one course from Group A.

Group A

Biology: 100^, 113, 190, 190L, 190+190L^, 191, 191L, 191+191L^, 223, 224, 251

Chemistry: 100^, 121^, 122^, 220

Geology: 100^, 101, 102, 103, 101+103^, 105, 127, 132, 201

Physics: 100^, 151^, 152^, 180, 180+180L^, 181, 181+181L^, 182, 182+182L^

Group B

Anthropology: 102, 102 & 110L^, 110L

Astronomy: 109^, 110^, 120

Atmospheric Sciences: 117^

Environmental Studies: 100^

Geography: 103, 103 & 104^, 104

Nutrition: 121^, 223

^ UNR core curriculum transfer courses to choose if intending to transfer to UNR.

**SOCIAL SCIENCES REQUIREMENT-**9 credits.

\* WNC: Choose from the following list. Must include work in two or more subjected areas. UNR:

Anthropology: 101^, 201^, 202^, 210, 212

Core Humanities: 203

Criminal Justice: 101, 102, 220, 230, 270

Economics: 100^, 102^, 103^

Geography: 106^, 200^

History: 101, 102, 111, 217, 295

Journalism: 101

Political Science: 103, 105, 108, 208, 231^, 295, 299

Psychology (except for PSY 210), 101^

Social Work: 220

Sociology (except for SOC 210), 101^

\* Number of credits required may vary according to specific emphasis. See a counselor.

^ UNR core curriculum transfer courses to choose if intending to transfer to UNR.

**U.S. & NEVADA CONSTITUTION REQUIREMENTS-**3 or 6 credits.

Must meet both requirements. Choose from:

Core Humanities: 203^

History: 111\*^

History: 101\* & 102\*^

History: 101\* & 217\*^

Political Science: 103\*^

History and Political Science Combination (History 101 \*, and Political Science 208 \*)

\* These courses will not fulfill UNR's CH203 requirement if taken after the student has been admitted and enrolled at UNR.

^ UNR core curriculum transfer courses to choose if intending to transfer to UNR.

**EMPHASIS REQUIREMENTS, PROGRAM REQUIREMENTS, OR GENERAL ELECTIVES-**21–24 credits.

Students should utilize this area to take courses that meet requirements for their major at their intended transfer school. Those who have not yet selected a major may choose from among any university transferable courses to explore their options. Students planning to transfer to the University of Nevada, Reno should obtain a transfer handout from WNC Counseling Services or the UNR Transfer Center.





# Associate of Science

## A Transfer Degree

The Associate of Science degree is designed to help students use the methods of observation, special analysis and logic by which we understand the mathematical, biological and physical nature of the world. The AS degree allows early choices for those planning a professional life in mathematics, science, engineering, medicine or agriculture.

The AS degree is primarily for the student who plans to transfer with junior standing to a four-year college or university for a baccalaureate degree. If the University of Nevada, Reno is the intended transfer school, choose ONLY those courses that are marked with a caret "^" from the list below. Satisfactory completion of an AS degree guarantees completion of the lower division general education requirements at UNR, UNLV or NSC. Students intending to transfer to other schools should see a counselor or follow the catalog of the transfer school.

Courses with a "B" after the course number (such as MATH 100B) and courses with a number under 100 (such as ENG 95) are not applicable toward this degree. All courses counted toward this degree must be university transferable.

A maximum of six credits of special topics classes in one subject area may apply toward any WNC degree.

*Note: UNR transfer information is based on requirements for the 2008-2009 school year. These requirements may change in subsequent years. See a counselor for the most up-to-date information.*

*Programs and areas of study offered at WNC include:*

- Biological Sciences
- Chemistry
- Computer Science
- Engineering Science
- Geosciences
- Mathematics
- Physics

## ASSOCIATE OF SCIENCE DEGREE REQUIREMENTS

**REQUIREMENTS:** A minimum of 60 credits

**ENGLISH/COMMUNICATIONS REQUIREMENTS**—6–8 credits.

WNC and UNR

English: 100^ or 101^, 102^

^ UNR core curriculum transfer courses to choose if intending to transfer to UNR.

**FINE ARTS REQUIREMENTS**—3 credits.

WNC and UNR

Art: 100^, 101\*, 124, 160^, 224, 260^, 261^

Dance: 101

Humanities: 101^

Music: 121^, 125

Music: Ensemble: 101\*

Theatre: 100^, 105\*, 180^

\* Course may not meet the Fine Arts requirement at all universities.

Please see a counselor.

^ UNR core curriculum transfer courses to choose if intending to transfer to UNR.

**HUMANITIES REQUIREMENTS**—6 credits.

UNR: Choose one course from each UNR group:

UNR Group A

Core Humanities: 201^

English: 231\*^

History: 105\*^

Philosophy: 200\*^

UNR: Group B

Core Humanities: 202^

English: 232\*^

History: 106\*^

Philosophy: 207\*^

WNC: Choose From:

Core Humanities: 201^, 202^

English: 200, 223, 231^, 232^, 250, 261, 266, 267, 271, 275

History: 105^, 106^, 207, 247

Philosophy (except for PHIL 102, 114)

\* These courses will not fulfill UNR's CH 201 and/or CH 202 requirement, if taken after the student has been admitted and enrolled at UNR.

^ UNR core curriculum transfer courses to choose if intending to transfer to UNR.

**MATHEMATICS REQUIREMENTS**—6 credits.

WNC: Choose only for geosciences emphasis. Math requirement already fulfilled for other emphases.

Mathematics: 126, 127, 128^, 176^, 181^, 182, 283, 285

Statistics: 152^

^ UNR core curriculum transfer courses to choose if intending to transfer to UNR.

**SCIENCE REQUIREMENTS**—6 or 12 credits.

WNC: Choose 12 credits for math emphasis. Science requirements are already fulfilled for other emphases. UNR: Choose 6 credits, with at least one course from Group A.

Group A:

Biology: 100^, 190, 190+190L^, 191, 191+191L^, 200

Chemistry: 100^, 121^, 122^

Geology: 100^, 101, 103, 101+103^, 105

Physics: 100^, 151^, 152^, 180+180L, 181+181L, 182+182L

Group B:

Anthropology: 102, 102 & 110L^, 110L

Astronomy: 109^, 110^, 120

Atmospheric Sciences: 117^

Environmental Studies: 100^

Geography: 103, 104, 103+104^

^ UNR core curriculum transfer courses to choose if intending to transfer to UNR.

**SOCIAL SCIENCES REQUIREMENTS**—6 credits.

Anthropology: 101^, 201^, 202^, 210, 212

Core Humanities: 203

Criminal Justice: 101, 102, 220, 230, 270

Economics: 100^, 102^, 103^

Geography: 106^, 200^

History: 101, 102, 111, 217, 295

Journalism: 101

Political Science: 103, 105, 108, 208, 231^, 295, 299

Psychology: 101^, 102, 130, 233, 234, 240, 241, 261, 290, 299

Social Work: 220

Sociology: 101^, 102, 202, 205, 261, 275

^ UNR core curriculum transfer courses to choose if intending to transfer to UNR.

**U.S. & NEVADA CONSTITUTION REQUIREMENTS**—3 or 6 credits.

Must meet both requirements. Choose from:

Core Humanities: 203^

History: 111\*^

History: 101\* & 102\*^

History: 101\* & 217\*^

Political Science: 103\*^

History and Political Science Combination (History 101 \*, and Political Science 208 \*)

\* These courses will not fulfill UNR's CH 203 requirement if taken after the student has been admitted and enrolled at UNR.

^ UNR core curriculum transfer courses to choose if intending to transfer to UNR.

**EMPHASIS REQUIREMENTS, PROGRAM REQUIREMENTS, AND ELECTIVES**

Number of credits varies according to emphasis. Students should utilize this area to take courses that meet requirements for their major at their intended transfer school. Those who have not yet selected a major may choose from among any university transferable courses to explore their options. Students planning to transfer to the University of Nevada, Reno should obtain a transfer handout from WNC Counseling Services or the UNR Transfer Center.



# Associate of Applied Science

## The Occupational Degree

### ASSOCIATE OF APPLIED SCIENCE - Mission and Outcomes

**Mission:** The purpose of the Associate of Applied Science degree is to provide employment-related knowledge and skills necessary to succeed in a chosen field of study.

**Student Learning Outcomes:** Students who complete Associate of Applied Science degree at WNC are expected to demonstrate that they

- have met the general education student learning outcomes.
- know the subject matter appropriate to the emphasis of the degree.
- have acquired skills and can perform tasks necessary for employment or career advancement.

Students enrolled in any of these programs will benefit from "hands-on" laboratory experience within their major field. They will enter the job market with specific skills and knowledge useful for employment and advancement.

The Associate of Applied Science degree is designed for those students who desire a two-year course of study and training in an occupational and/or technological career field. Although the AAS degree is not designed to be a transfer program, some of the courses will transfer to four-year colleges or universities. Those students who wish to transfer to a four-year school should consult a WNC counselor. Coursework must total at least 60 credits.

Courses with a number under 100 (such as ENG 95) are not applicable toward an Associate of Applied Science degree at WNC.

Courses with a "B" designator after the number (such as MATH 100B) are college level courses which may apply toward a WNC degree but which may not transfer to UNR or UNLV. In some cases, these courses may transfer to other Nevada community colleges and Nevada State College or to other colleges and universities. See a WNC counselor for the latest transfer information.

A maximum of six credits of special topics classes in one subject area may apply toward any WNC degree.

To make decisions about specific emphases under the Associate of Applied Science degree, please refer to the academic programs pages or see a WNC counselor.

Note: All Associate of Applied Science degree and certificate programs require completion of appropriate courses in computation, communication and human relations. Additionally, introductory courses in all applied science and technology as well as all allied health programs include instruction in safety, industrial safety and environmental awareness, as appropriate.

Students with previous occupational or practical experience may challenge certain course requirements and prerequisites. In some cases, required courses may be waived, allowing the student to proceed to coursework at the appropriate level. In other cases, challenge examinations may be arranged for which the student can receive academic credit and a "pass" grade for the course.

*Programs and areas of study offered at WNC include:*

- Accounting
- Automotive Mechanics
- Business, General Business Emphasis
- Computer Technology - Computer & Office Technology
- Computer Technology - Information Technology
- Computer Technology - Computer Networking Technology
- Construction Technology, Construction Project Management
- Criminal Justice
- Criminal Justice, Law Enforcement/Academy
- Drafting Technology - Architectural
- Drafting Technology - Civil
- Drafting Technology - Mechanical
- Early Childhood Education
- Geographic Information Systems (GIS)
- Graphic Communications
- Machine Tool Technology
- Management
- Nursing
- Real Estate
- Welding Technology



## ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS

**REQUIREMENTS:** A minimum of 60 credits

**ENGLISH/COMMUNICATIONS REQUIREMENT**-6 credits.

*Must include a writing course.*

Business: 107, 108

Communication: 113, 215

Criminal Justice: 103

English

Journalism: 201

Reading

Writing Course (Business 108, English 100, 101, 102 or any other 200 level

English class except ENG 258)

**HUMAN RELATIONS REQUIREMENT**-3 credits.

Anthropology: 101, 201

Business: 110B, 287B

Counseling and Personal Development: 117, 129B

Criminal Justice: 270

Early Childhood Education: 121

Human Development & Family Studies: 201, 202

Law: 263

Management: 201, 212, 283

Psychology (except for PSY 210)

Sociology (except for SOC 210)

**HUMANITIES/SOCIAL SCIENCE REQUIREMENTS**-3 credits.

*Choose from either humanities or social science areas:*

**Humanities Area:**

Art: 100, 101\*, 124, 160, 224, 260, 261

Core Humanities: 201, 202

Dance: 101

English: 200, 221, 223, 231, 232, 250, 261, 266, 267, 271, 275

History: 105, 106, 207, 247

Humanities: 101

Music: 111\*, 121

Philosophy (except for PHIL 102, 114)

Theatre: 100, 105, 180

**Social Sciences Area:**

Anthropology: 101, 201, 202, 210, 212

Core Humanities: 203

Criminal Justice: 101, 102, 120, 215, 220, 225, 226, 230, 270

Economics: 100, 102, 103

Geography: 106, 200

History: 101, 102, 111, 217, 295

Journalism: 101

Political Science

Psychology (except for PSY 210)

Social Work: 220

Sociology (except for SOC 210))

*\* Course may not meet the fine arts requirement at all universities.*

*Please see a counselor.*

**MATHEMATICS REQUIREMENT**-3 credits.

Business: 109B

Economics: 261, 262

Mathematics

Psychology: 210

Real Estate: 102B

Sociology: 210

Statistics: 152

**SCIENCE REQUIREMENT**-6 credits.

Anthropology: 102, 110L

Astronomy: 109, 110, 120

Atmospheric Sciences: 117

Biology (except for BIOL 208)

Chemistry (except for CHEM 241, 241L, 242, 242L)

Environmental Studies

Geography: 103, 104

Geology: 105 (except for GEOL 111B, 112B, 113B, 299B)

Natural Resources: 101

Nutrition: 121, 223

Physics (except for PHYS 293)

**U.S. & NEVADA CONSTITUTION REQUIREMENTS**-3 or 6 credits.

*Must meet both requirements. Choose from the following:*

Core Humanities: 203

History: 101 & 217

History: 101 & 102

History: 111

Political Science: 103

History and Political Science Combination (History 101 and Political Science 208)

**EMPHASIS REQUIREMENTS, PROGRAM REQUIREMENTS, AND GENERAL ELECTIVES**

Number of credits required may vary by emphasis.

Some credits earned in non-traditional courses may be considered for elective credit and may require review in order to be applied to the AAS degree.



# Associate of General Studies

The Degree to Meet a Variety of Needs

## ASSOCIATE OF GENERAL STUDIES - Mission and Outcomes

**Mission:** The purpose of the Associate of General Studies degree is to provide academic knowledge and skills for personal growth, professional advancement, and/or successful transfer.

**Student Learning Outcomes:** Students who complete an Associate of General Studies degree at WNC are expected to demonstrate that they

- have met the general education student learning outcomes.
- know the subject matter appropriate to their fields of study.

The Associate of General Studies has increasingly been utilized by students who intend to transfer to four-year colleges and universities. Although it was not designed for transfer, it can be used for this purpose if courses are selected carefully. The majority of the courses chosen should transfer to fulfill core and major requirements.

It is recommended that anyone planning to attend the University of Nevada, Reno complete ENG 101 and 102, MATH 120 or a higher level math, and science/social science courses that fulfill UNR's core curriculum requirements. Any "B" course credits will need to be made up upon transfer.

Courses with a number under 100 (such as ENG 95) are not applicable toward an Associate of General Studies degree. Courses with a "B" designator after the number (such as MATH 100B) are college level courses which may apply toward a WNC degree but will not transfer to UNR or UNLV. In some cases, these courses may transfer to other Nevada community colleges and Nevada State College or other colleges and universities. See a WNC counselor for the latest transfer information.

A maximum of six credits of special topics classes in one subject area may apply toward any WNC degree.

## ASSOCIATE OF GENERAL STUDIES DEGREE REQUIREMENTS

**REQUIREMENTS:** A minimum of 60 credits

**ENGLISH/COMMUNICATIONS REQUIREMENT-6 credits.**

*Must include a three-credit writing course.*

Business: 107, 108

Communication: 113, 215

Criminal Justice: 103

English

Journalism: 201

Reading

Writing Course (Business 108, English 100, 101, 102 or any other 200 level English class except ENG 258)

**FINE ARTS AND HUMANITIES REQUIREMENTS-3 credits.**

American Sign Language

Art (except for ART 107)

Core Humanities: 201, 202

Crafts

Dance: 101

English: 190, 200, 223, 231, 232, 243, 250, 252, 267, 271, 282, 297

Foreign Languages

Graphic Communications (except for GRC 107)

History: 105, 106, 207, 247

Humanities: 101

Music: 125

Philosophy (except for PHIL 102, 114)

Theatre: 100, 105, 180

**MATHEMATICS REQUIREMENT-3 credits.**

Business: 109B

Economics: 261, 262

Mathematics

Psychology: 210

Real Estate: 102B

Sociology: 210

Statistics: 152

**SCIENCE REQUIREMENT-3 credits.**

Anthropology: 102, 110L

Astronomy: 109, 110, 120

Atmospheric Sciences: 117

Biology (except for BIOL 208)

Chemistry (except for CHEM 241, 241L, 242, 242L)

Environmental Studies

Geography: 103, 104

Geology: any Geology (except for GEOL 111B, 112B, 113B, 229B)

Natural Resources: 101

Nutrition: 121, 223

Physics (except for PHYS 293)

**SOCIAL SCIENCES REQUIREMENT-3 credits.**

Anthropology: 101, 201, 202, 210, 212

Core Humanities: 203

Criminal Justice

Economics: 100, 102, 103

Geography: 106, 200

History: 101, 102, 111, 217, 295

Journalism: 101

Political Science

Psychology (except for PSY 210)

Social Work: 220

Sociology (except for SOC 210)

**U.S. & NEVADA CONSTITUTION REQUIREMENTS-3 or 6 credits.**

*Must meet both requirements. Choose from:*

Core Humanities: 203

History: 111

History: 101 & 102

History: 101 & 217

Political Science: 103

History and Political Science Combination (History 101 and Political Science 208)

**GENERAL ELECTIVES-36 or 39 credits.**

Students may choose from any occupational or general education courses to be used as electives for this degree. Some non-traditional credit approved by Admissions and Records may be applicable to satisfy course requirements for occupational degrees, while other such credits may be used as electives for the AGS and AAS degrees only. Students planning to transfer to the University of Nevada, Reno should use the UNR core curriculum guide to satisfy general education requirements



# Certificate of Achievement

For those desiring a shorter course of study, WNC offers certificates of achievement in many occupational areas. Students enrolled in any of these programs will benefit from "hands-on" laboratory experience within their major field. They will enter the job market with specific skills and knowledge useful for employment and advancement.

A minimum of 30 credits is required for any certificate of achievement, although the exact number of credits required may differ with particular subject matter.

## *Programs and areas of study offered at WNC include:*

- American Sign Language
- Automotive Mechanics
- Bookkeeping
- Business
- Computer Applications
- Computer Technology, Network Support Technician
- Computer Technology, System Administration Technician
- Criminal Justice, Law Enforcement/Academy
- Criminal Justice, 9-1-1 Dispatch Telecommunications
- Customer Service
- Desktop Publishing
- Drafting Technology - Architectural
- Drafting Technology - Mechanical
- Early Childhood Education
- Geographic Information Systems (GIS)
- Graphic Communications
- Machine Tool Technology
- Retail Management
- Surgical Technology
- Welding Technology

All certificates include general education requirements which can be fulfilled from the following list of courses.

Courses with a number under 100 (such as ENG 95) are not applicable toward a certificate of achievement at WNC.

Courses with a "B" designator after the number (such as MATH 100B) are college level courses which may apply toward a WNC degree but which may not transfer to UNR or UNLV. In some cases, these courses may transfer to other Nevada community colleges and Nevada State College or to other colleges and universities. See a WNC counselor for the latest transfer information.

**REQUIREMENTS:** A minimum of 30 total credits chosen from the following categories:

## **ENGLISH/COMMUNICATIONS REQUIREMENTS-3-6 credits.**

Must include a writing course

Business: 107, 108

Communication: 113, 215

Criminal Justice: 103

English

Journalism: 201

Reading

Writing Course (Business 108, English 100, 101, 102 or any other 200 level English class except ENG 258)

## **HUMAN RELATIONS REQUIREMENT-1-3 credits.**

Anthropology: 101, 201

Business: 110B, 287B

Counseling and Personal Development: 117, 129B

Criminal Justice: 270

Early Childhood Education: 121

Human Development & Family Studies: 201, 202

Law: 263

Management: 201, 212, 283

Psychology (except for PSY 210)

Sociology (except for SOC 210)

## **MATHEMATICS REQUIREMENT-3 credits.**

Business: 109B

Economics: 261, 262

Mathematics

Psychology: 210

Real Estate: 102B

Sociology: 210

Statistics: 152

## **SUBJECT REQUIREMENTS-Varies by subject.**

A minimum of 30 credits is required for any certificate of achievement, although the exact number of credits required may differ with particular subject matter.

### **CERTIFICATE OF ACHIEVEMENT - Mission and Outcomes**

**Mission:** The purpose of the Certificate of Achievement is to provide employment-related knowledge and skills.

**Student Learning Outcomes:** Students who complete a Certificate of Achievement are expected to demonstrate that they

1. know the subject matter appropriate to the emphasis of the certificate.
2. are able to do the following:
  - a. acquire the skills necessary for employment or career enhancement.
  - b. successfully represent themselves to a potential employer.
  - c. demonstrate effective communication and computational skills appropriate to the certificate area.
  - d. utilize appropriate resources for remaining current in the certificate area.
3. have developed an appreciation of the importance of social, ethical, legal and diversity issues.





# ACADEMIC DEGREES

## ACCOUNTING

### *Associate of Applied Science in Business*

The Accounting emphasis has been designed to enable students to establish, maintain and manage both manual and automated accounting systems. Students can also develop the necessary competencies to create and analyze information for managerial decision-making situations. In addition to this degree program, students who intend to become full-charge bookkeepers will also need experience in the field.

**Salary:** \$42,272–\$66,186 / year (Nevada)

**Career Outlook:** Faster than average growth through 2014

**Good To Know:** Four major accounting fields - public, management, government and internal auditing

**WNC Academic Division:** Business and Computer Technology

**Total Requirements:** 60 credits

### Business Core Requirements

27 Credits

ACC 201*	Financial Accounting	3
ACC 202	Managerial Accounting	3
BUS 101	Introduction to Business	3
or MGT 103	Small Business Management	
BUS 110B	Human Relations For Employment	3
or MGT 201	Principles of Management	
or MGT 212	Leadership & Human Relations	
or MGT 283	Introduction to Human Resources Management	
BUS 273	Business Law I	3
ECON 102	Principles of Microeconomics	3
ECON 103	Principles of Macroeconomics	3
IS 101	Introduction to Information Systems	3
IS 201	Computer Applications	3

\* ACC 135B recommended prior to ACC 201

### Emphasis Requirements\*

15 Credits

ACC 203	Intermediate Accounting I	3
ACC 220	Microcomputer Accounting Systems	3

### Choose 9 credits from the following:

ACC 105	Taxation For Individuals	3
ACC 180B	Payroll & Employee Benefit Accounting	3
ACC 198B	Special Topics in Accounting	3
ACC 204	Intermediate Accounting II	3
ACC 223B	Introduction to QuickBooks	3
ACC 251	Introduction to Auditing	3
ACC 261	Governmental Accounting	3
ACC 290B	Certified Bookkeeper Course	6
ACC 295B	Work Experience I	3
ACC 299B	Advanced Special Topics in Accounting	3
COT 262	Intermediate Spreadsheets Concepts	3

\* Students should consult a counselor or instructor for information regarding sequence of accounting courses.

### General Education Requirements

18 Credits

English/Communications Requirement: Recommended: BUS 107, BUS 108;	
Must include a writing course	6
Mathematics Requirement: BUS 109B or higher level mathematics course	3
Science Requirement	3
U.S. and Nevada Constitution Requirements	3
General Electives	3

A list of all courses filling general education requirements for the Associate of Applied Science can be found on the Associate of Applied Science page.

### ACCOUNTING - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
ACC 201	3 <input type="checkbox"/>	ACC 203	3 <input type="checkbox"/>
BUS 108 or Eng/Comm (Writing class required)	3 <input type="checkbox"/>	Accounting Elective	3 <input type="checkbox"/>
BUS 109B or higher math	3 <input type="checkbox"/>	BUS 101 or MGT 103	3 <input type="checkbox"/>
ECON 102	3 <input type="checkbox"/>	Science Elective	3 <input type="checkbox"/>
IS 101	3 <input type="checkbox"/>	U.S./Nevada Constitutions	3 <input type="checkbox"/>
Second Semester	Completed	Fourth Semester	Completed
ACC 202	3 <input type="checkbox"/>	Accounting Elective	3 <input type="checkbox"/>
ACC 220	3 <input type="checkbox"/>	BUS 110B, MGT 201, MGT 212 or MGT 283	3 <input type="checkbox"/>
BUS 107 or other Eng/Comm	3 <input type="checkbox"/>	BUS 273	3 <input type="checkbox"/>
ECON 103	3 <input type="checkbox"/>	General Elective	3 <input type="checkbox"/>
IS 201	3 <input type="checkbox"/>	Science Elective	3 <input type="checkbox"/>

## AMERICAN SIGN LANGUAGE

- See Deaf Studies -



### ACCOUNTING - Mission

**Mission:** The purpose of the AAS Accounting in business is to provide the knowledge and skills necessary to succeed in the current business environment.



# ACADEMIC DEGREES

## AUTOMOTIVE MECHANICS

### Associate of Applied Science

The Automotive Mechanics program offers students an opportunity to acquire the necessary skills and technical theory for a successful career as an automotive mechanic. Individuals who are now employed in the automotive mechanics field will be able to upgrade their knowledge. Students obtaining this associate degree will have completed courses of a very technical nature, chosen to complement each other and provide breadth and depth of diagnostic and repair skill abilities necessary to work in a service facility.

**Salary:** \$27,265–\$49,948 / year (Nevada)

**Career Outlook:** Average growth through 2014

**Good To Know:** Mechanics can be certified in as many as eight service areas

Most jobs are at repair shops and auto dealerships

**WNC Academic Division:** Technology

**Total Requirements:** 61 credits

**Program Requirements** 37 Credits

AUTO 101B	Introduction to General Mechanics	3
AUTO 115B	Auto Electricity & Electronics I	4
AUTO 117B	Advanced Auto Electronics	4
AUTO 130B	Engine Reconditioning	3
AUTO 145B	Automotive Brakes	4
AUTO 155B	Steering & Suspension	4
AUTO 160B	Auto Air Conditioning	3
AUTO 225B	Engine Performance I/Fuel & Ignition	4
AUTO 227B	Engine Performance II/Emission Control	4
AUTO 235B	Engine Performance III/Diagnostics	4

**General Education Requirements** 24 Credits

English/Communications Requirement: Recommended: BUS 107&108;

Must include a writing course	6
Human Relations Requirement: Recommended: BUS 110B	3
Humanities/Social Science Requirements	3
Mathematics Requirement	3
Science Requirement	6
U.S. and Nevada Constitution Requirements	3

*A list of all courses filling general education requirements for the Associate of Applied Science can be found on the Associate of Applied Science page.*

## AUTOMOTIVE MECHANICS

### Certificate of Achievement

WNC Academic Division: Technology

**Total Requirements:** 31 credits

**Subject Requirements** 19 Credits

AUTO 101B	Introduction to General Mechanics	3
AUTO 115B	Auto Electricity & Electronics I	4
AUTO 145B	Automotive Brakes	4
AUTO 155B	Steering & Suspension	4
AUTO 225B	Engine Performance I/Fuel & Ignition	4

**General Education Requirements** 12 Credits

English/Communications Requirements (Must include a writing course)	6
Human Relations Requirement (Recommended: BUS 110B)	1
Mathematics Requirement	3
General Electives	2

*A list of all courses filling general education requirements for the Certificate of Achievement can be found on the Certificate of Achievement page.*

### AUTOMOTIVE MECHANICS - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
AUTO 101B	3 <input type="checkbox"/>	AUTO 145B	4 <input type="checkbox"/>
AUTO 115B	4 <input type="checkbox"/>	AUTO 225B	4 <input type="checkbox"/>
AUTO 130B	3 <input type="checkbox"/>	AUTO 227B	4 <input type="checkbox"/>
BUS 107	3 <input type="checkbox"/>	Humanities/Social Science	
Mathematics Course	3 <input type="checkbox"/>	Course	3 <input type="checkbox"/>
		Science Course	3 <input type="checkbox"/>
Second Semester	Completed	Fourth Semester	Completed
AUTO 117B	4 <input type="checkbox"/>	AUTO 235B	4 <input type="checkbox"/>
AUTO 155B	4 <input type="checkbox"/>	BUS 110B	3 <input type="checkbox"/>
AUTO 160B	3 <input type="checkbox"/>	Science Course	3 <input type="checkbox"/>
BUS 108	3 <input type="checkbox"/>	U.S./Nevada	
Humanities/Social Science		Constitutions	3 <input type="checkbox"/>
Course	3 <input type="checkbox"/>		

## ASSOCIATE OF APPLIED SCIENCE - AUTOMOTIVE MECHANICS

### Mission & Outcomes

**Mission:** The mission of the Associate of Applied Science in Automotive Mechanics is to provide employment-related knowledge and skills necessary to succeed in automotive field.

**Student Learning Outcomes:** Students who complete an Associate of Applied Science in Automotive Mechanics are expected to:

- Know the subject matter appropriate to the emphasis of the automotive field,
- Acquire skills and perform tasks necessary for employment or career enhancement,
- Present themselves effectively to a potential employer,
- Utilize appropriate resources to remain current in the automotive field.



# ACADEMIC DEGREES

## BIOLOGICAL SCIENCES

### Associate of Science

The Biological Sciences emphasis is designed to equip students with basic and applied knowledge in general biology with an emphasis in critical thinking, bioethical issues, a basic understanding of science and its methods, and laboratory and analytical skills related to the field of biology. Students are prepared to pursue studies in the fields of, but not limited to, biology, environmental studies, pre-health care, biochemistry, biotechnology, or as preparation for a teaching career.

**Salary:** \$53,235–\$72,120 / year (Nevada)

**Career Outlook:** Average growth through 2014. Biochemists and biophysicists are expected to grow faster than average

**Good To Know:** For advancement, some fields require graduate degrees

**WNC Academic Division:** Science, Mathematics & Engineering

**Total Requirements:** 63 credits

**Emphasis Requirements** 39 Credits

BIOL 190	Introduction to Cell and Molecular Biology	3
BIOL 190L	Introduction to Cell and Molecular Biology Lab	1
BIOL 191	Introduction to Organismal Biology	3
BIOL 191L	Introduction to Organismal Biology Lab	1
CHEM 121	General Chemistry I	4
CHEM 122	General Chemistry II	4
MATH 128*	Precalculus and Trigonometry	5
MATH 181	Calculus I	4
PHYS 151	General Physics I	4
PHYS 152	General Physics II	4

\* Can substitute Math 126/127 for Math 128

### Emphasis Electives

**Choose 6 credits from the following list:**

BIOL 208	Human Genetics	3
BIOL 223	Human Anatomy and Physiology I	4
BIOL 224	Human Anatomy and Physiology II	4
BIOL 251	General Microbiology	4
MATH 182	Calculus II	4
NUTR 223	Principles of Nutrition	3
STAT 152	Introduction to Statistics	3

**General Education Requirement** 24 Credits

English/Communications Requirements: Recommended: ENG 101, ENG 102	6
Fine Arts Requirements	3
Humanities Requirements: Recommended: CH 201, CH 202	6
Social Sciences Requirements	6
U.S. and Nevada Constitution Requirements	3

*A list of all courses filling general education requirements for the Associate of Science can be found on the Associate of Science page.*

*Note: EPY 150 is strongly recommended but not required for graduation. PHYS 180/180L and 181/181L are acceptable in lieu of PHYS 151 & 152. MATH 152 is required for a bachelor's degree in biology at University of Nevada, Reno. It is recommended that students pursuing other areas in science take MATH 182.*

### BIOLOGICAL SCIENCES - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
General Education Course	3 <input type="checkbox"/>	Emphasis Elective	3 <input type="checkbox"/>
BIOL 190	3 <input type="checkbox"/>	General Education Courses	9 <input type="checkbox"/>
BIOL 190L	1 <input type="checkbox"/>	PHYS 151	4 <input type="checkbox"/>
CHEM 121	4 <input type="checkbox"/>		
MATH 128	5 <input type="checkbox"/>	Fourth Semester	Completed
		Emphasis Elective	3 <input type="checkbox"/>
Second Semester	Completed	General Education Course	9 <input type="checkbox"/>
General Education Courses	3 <input type="checkbox"/>	PHYS 152	4 <input type="checkbox"/>
BIOL 191	3 <input type="checkbox"/>		
BIOL 191L	1 <input type="checkbox"/>		
CHEM 122	4 <input type="checkbox"/>		
MATH 181	4 <input type="checkbox"/>		

### ASSOCIATE OF APPLIED SCIENCE - BIOLOGICAL SCIENCES

#### Mission & Outcomes

**Mission:** The mission of the Associate of Science Degree is "to provide academic knowledge and skills for successful transfer to meet higher educational goals". Additionally the mission for the biological sciences emphasis is to "equip students with basic and applied knowledge in general biology with an emphasis in critical thinking, bioethical issues, a basic understanding of science and its methods, and laboratory and analytical skills related to the field of biology" and to prepare students for transfer into many disciplines including but not limited to, biology, environmental studies, pre-health care, biochemistry, biotechnology, or as preparation for a teaching career.

**Student Learning Outcomes:** The student learning outcomes, pertinent to this degree, are as follows:

- Demonstrate an understanding of the organization of biological systems at the molecular, cellular, and organismal levels.
- Recognize the great diversity of living forms and understand the biological basis of their common evolutionary origin.
- Demonstrate a knowledge of the basic methods, instruments, and analytic skills used to conduct scientific research in biology.
- Develop an understanding of the history and philosophy of science as well as its relationship to society and the daily lives of students.
- Develop the critical thinking skills and scientific literacy necessary to critically review the scientific literature in biology, analyze problems, and interpret results using the scientific method. Once acquired, these skills will provide a foundation for lifelong learning and career development



# ACADEMIC DEGREES

## BOOKKEEPING

### *Certificate of Achievement*

This course of study is for working professionals and students who wish to advance their career in the bookkeeping profession. Upon successful completion, students will be able to sit for a nationally administered exam give by the American Institute of Professional Bookkeepers. Once a student passes this exam and obtains two years of bookkeeping experience, individuals earn the right to call themselves "Certified Bookkeepers." To maintain certification, individuals are required to obtain 60 hours of continuing education over a three-year period.

**Salary:** \$25,000–\$37,000 / year (Nevada)

**Career Outlook:** Slower than average growth through 2014

**Good To Know:** The majority of new jobs will be created in small, rapidly growing organizations

**WNC Academic Division:** Business and Computer Technology

**Total Requirements:** 30-33 credits

Subject Requirements		21-24 Credits
ACC 135B	Bookkeeping I	3
& ACC 201	Financial Accounting	3
or ACC 201	Financial Accounting	
& ACC 202	Managerial Accounting	
ACC 220	Microcomputer Accounting Systems	3
BUS 110B	Human Relations For Employment	3
or MGT 201	Principles of Management	
or MGT 212	Leadership & Human Relations	
or MGT 283	Introduction to Human Resources Management	
IS 101	Introduction to Information Systems	3
IS 201	Computer Applications	3

**Choose 3-6 credits from the following:**

ACC 105	Taxation For Individuals	3
ACC 180B	Payroll & Employee Benefit Accounting	3
ACC 198B	Special Topics in Accounting	3
ACC 203	Intermediate Accounting I	3
ACC 223B	Introduction to QuickBooks	3
ACC 251	Introduction to Auditing	3
ACC 261	Governmental Accounting	3
ACC 290B	Certified Bookkeeper Course	6
ACC 299B	Advanced Special Topics in Accounting	3

**General Education Requirements** 9 Credits

English/Communications Requirements: Recommended: BUS 107, BUS 108;

Must include a writing course 6

Mathematics Requirement: BUS 109B or higher level mathematics course 3

A list of all courses filling general education requirements for the Certificate of Achievement can be found on the Certificate of Achievement page.

### BOOKKEEPING - Suggested Course Sequence

First Semester	Completed	Second Semester	Completed
ACC 135B or ACC 210	3 <input type="checkbox"/>	ACC 202	3 <input type="checkbox"/>
BUS 108 or Eng/Comm	3 <input type="checkbox"/>	ACC 220	3 <input type="checkbox"/>
BUS 109B or higher math	3 <input type="checkbox"/>	Accounting Elective	3-6 <input type="checkbox"/>
BUS 110B, MGT 201,		BUS 107 or Eng/Comm	3 <input type="checkbox"/>
MGT 212 or MGT 283	3 <input type="checkbox"/>	IS 201	3 <input type="checkbox"/>
IS 101 or IS 201	3 <input type="checkbox"/>		

## BOOKKEEPER CERTIFICATION

### *Certification and Licensing Preparation*

This course is for working professionals and students who wish to advance their career in the bookkeeping profession. Upon successful completion, students will be able to sit for a nationally administered exam give by the American Institute of Professional Bookkeepers. Once a student passes this exam and obtains two years of bookkeeping experience, individuals earn the right to call themselves "Certified Bookkeepers." To maintain certification, individuals are required to obtain 60 hours of continuing education over a three-year period.

**Salary:** \$25,000–\$37,000 / year (Nevada)

**Career Outlook:** Slower than average growth through 2014

**Good To Know:** The majority of new jobs will be created in small, rapidly growing organizations

**Total Requirements:** 6 credits

ACC 290B	Certified Bookkeeper Course	6
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### BOOKKEEPER CERTIFICATION - Mission & Outcomes

**Mission:** The purpose of the Bookkeeper Certification Program is to provide students with the knowledge and skills in the bookkeeping field and to prepare students to take the Certified Bookkeeper Examination.

#### Student Learning Outcomes

At completion of this program, students will have mastered the following areas:

- Adjusting Entries
- Correction of accounting errors
- Payroll
- Depreciation
- Inventory
- Internal controls





# ACADEMIC DEGREES

## BUSINESS PROGRAM

The Business Division offers Associate of Applied Science degrees, certificates of achievement, and certification and licensing preparation. The mission of the division is to prepare students for transfer to four-year colleges and/or to provide the knowledge they need for their careers.

*Programs of study offered at WNC include:*

- Accounting
- Business
- Computer & Office Technology
- Management
- Real Estate

*Certificates offered at WNC include:*

- Bookkeeping
- Business
- Customer Service
- Desktop Publishing
- Retail Management

## BUSINESS

*Certificate of Achievement*

**WNC Academic Division:** Business and Computer Technology

**Total Requirements:** 30 credits

<b>Subject Requirements</b>		21 Credits
ACC 135B	Bookkeeping I	3
or ACC 201	Financial Accounting	
BUS 101	Introduction to Business	3
or MGT 103	Small Business Management	
BUS 107*	Business Speech Communications	3
BUS 110B	Human Relations For Employment	3
or MGT 212	Leadership & Human Relations	
BUS 112B	Customer Service	3
or MKT 261	Introduction to Public Relations	
or MKT 210	Marketing Principles	
IS 101	Introduction to Information Systems	3
or IS 201	Computer Applications	
MGT 201	Principles of Management	3
or MGT 235	Organizational Behavior	

\* BUS 107 is strongly recommended; COM 113 is acceptable in lieu of BUS 107

### General Education Requirements

English/Communications Requirements: Recommended: BUS 108;	9 Credits
Must be a writing course	3
Mathematics Requirement: BUS 109B or higher level mathematics course	3
General Electives	3

*A list of all courses filling general education requirements for the Certificate of Achievement can be found on the Certificate of Achievement page.*

### BUSINESS - Suggested Course Sequence

First Semester	Completed	Second Semester	Completed
ACC 135B or ACC 201	3 <input type="checkbox"/>	BUS 108	3 <input type="checkbox"/>
BUS 101 or MGT 103	3 <input type="checkbox"/>	BUS 109B	3 <input type="checkbox"/>
BUS 107	3 <input type="checkbox"/>	BUS 112B, MKT 261	
BUS 110B or MGT 212	3 <input type="checkbox"/>	or MKT 210	3 <input type="checkbox"/>
IS 101 or IS 201	3 <input type="checkbox"/>	Elective	3 <input type="checkbox"/>
		MGT 201 or MGT 235	3 <input type="checkbox"/>

### CERTIFICATE OF BUSINESS - Mission & Outcomes

**Mission:** The purpose of the Certificate in Business is to provide the knowledge and skills necessary to succeed in the business environment.

**Student Learning Outcomes:** Upon completing the Certificate in Business, students will be able to: 1. Provide employment related knowledge and skills. 2. Know subject matter. 3. Understand accounting principles and their importance to the business environment. 4. Demonstrate managerial and personal skills. 5. Demonstrate oral, written, computational and computer skills. 6. Utilize appropriate resources to remain current in their field. 7. Appreciate the importance of social, ethical, legal and diversity issues.

## BUSINESS

*General Business Emphasis Associate of Applied Science*

The General Business emphasis provides knowledge and skills in the field of business. Students are encouraged to meet with a WNC counselor to identify programs which best suit their career goals.

**Salary:** Depends on size & type of organization. \$42,896–\$90,873 / year (Nevada)

**Career Outlook:** Average growth through 2014

**Good To Know:** Often includes hiring, training and supervising employees

**WNC Academic Division:** Business and Computer Technology

**Total Requirements:** 60 credits

<b>Business Core Requirements</b>		27 Credits
ACC 135B	Bookkeeping I	3
& ACC 201	Financial Accounting	3
or ACC 201	Financial Accounting	
& ACC 202	Managerial Accounting	
BUS 101	Introduction to Business	3
or MGT 103	Small Business Management	
BUS 110B	Human Relations For Employment	3
or MGT 201	Principles of Management	
or MGT 212	Leadership & Human Relations	
or MGT 283	Introduction to Human Resources Management	
BUS 273	Business Law I	3
ECON 102	Principles of Microeconomics	3
ECON 103	Principles of Macroeconomics	3
IS 101	Introduction to Information Systems	3
IS 201	Computer Applications	3

### Emphasis Requirements

15 Credits  
Choose from the following areas: Accounting, Business, Economics, Finance, Insurance, Management, Marketing or Real Estate. Must take at least 3 credits in three different subject areas.

### General Education Requirements

English/Communications Requirement: Recommended: BUS 107, BUS 108;	18 Credits
Must include a writing course	6
Mathematics Requirement: BUS 109B or higher level mathematics course	3
Science Requirement	3
U.S. and Nevada Constitution Requirements	3
General Electives	3

*A list of all courses filling general education requirements for the Associate of Applied Science can be found on the Associate of Applied Science page.*

### BUSINESS - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
U.S./Nevada Constitution	3 <input type="checkbox"/>	ACC 135B or ACC 201	3 <input type="checkbox"/>
BUS 101 or MGT 103	3 <input type="checkbox"/>	BUS 110B, MGT 201,	
BUS 107	3 <input type="checkbox"/>	MGT 212, or MGT 283	3 <input type="checkbox"/>
BUS 109B or math	3 <input type="checkbox"/>	Business Course	3 <input type="checkbox"/>
IS 101	3 <input type="checkbox"/>	Business Course	3 <input type="checkbox"/>
		ECON 103	3 <input type="checkbox"/>
Second Semester	Completed	Fourth Semester	Completed
Science Course	3 <input type="checkbox"/>	General Elective	3 <input type="checkbox"/>
BUS 108	3 <input type="checkbox"/>	ACC 201 or ACC 202	3 <input type="checkbox"/>
BUS 273	3 <input type="checkbox"/>	Business Elective	3 <input type="checkbox"/>
ECON 102	3 <input type="checkbox"/>	Business Elective	3 <input type="checkbox"/>
IS 101	3 <input type="checkbox"/>	Business Elective	3 <input type="checkbox"/>

### ASSOCIATE OF APPLIED SCIENCE BUSINESS - Mission & Outcomes

**Mission:** The purpose of the Associate of Applied Science degree in business is to provide the knowledge and skills necessary to succeed in the current business environment.

**Student Learning Outcomes:** Students who complete an Associate of Applied Science degree at WNC are expected to demonstrate that they:

- know the subject matter appropriate to the emphasis of the degree.
- have developed managerial and personal skills essential to the current business environment.

# ACADEMIC DEGREES

## CHEMISTRY

### Associate of Science

The Chemistry emphasis is designed to prepare students to transfer to baccalaureate programs in the science, health, teaching, and engineering fields, or the work force in chemistry-related industries.

**Salary:** \$53,876–\$86,866 / year (Nevada)

**Career Outlook:** Slower than average growth through 2014

**Good To Know:** For advancement, some fields require graduate degrees. Much of growth will be in drug manufacturing companies and research testing services

**WNC Academic Division:** Science, Mathematics & Engineering

**Total Requirements:** 60 credits

**Emphasis Requirements** 36 Credits

BIOL 190	Introduction to Cell and Molecular Biology	3
BIOL 190L	Introduction to Cell and Molecular Biology Lab	1
CHEM 121	General Chemistry I	4
CHEM 122	General Chemistry II	4
CHEM 241	Organic Chemistry I	3
CHEM 241L	Organic Chemistry for Life Sciences Laboratory I	1
CHEM 242	Organic Chemistry II	3
CHEM 242L	Organic Chemistry for Life Sciences Laboratory II	1
MATH 181	Calculus I	4
MATH 182	Calculus II	4
PHYS 180	Engineering Physics I	3
PHYS 180L	Engineering Physics I Lab	1
PHYS 181	Engineering Physics II	3
PHYS 181L	Engineering Physics II Lab	1

**General Education Requirements** 24 Credits

English/Communications Requirements: Recommended: ENG 101, ENG 102	6
Fine Arts Requirements	3
Humanities Requirements: Recommended: CH 201, CH 202	6
Social Sciences Requirements	6
U.S. and Nevada Constitution Requirements	3

*A list of all courses filling general education requirements for the Associate of Science can be found on the Associate of Science Degree Requirements page.*

NOTE: EPY 150 is strongly recommended but not required for graduation. PHYS 151 & 152 are acceptable in lieu of PHYS 180 & 181. GEOL 101/103 recommended in addition to the above for those pursuing a bachelor's degree in geochemistry.

### CHEMISTRY - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
BIOL 190	3 <input type="checkbox"/>	General Education	
BIOL 190L	1 <input type="checkbox"/>	Courses	9 <input type="checkbox"/>
CHEM 121	4 <input type="checkbox"/>	PHYS 181	3 <input type="checkbox"/>
General Education		PHYS 181L	1 <input type="checkbox"/>
Course	3 <input type="checkbox"/>	Program Elective	4 <input type="checkbox"/>
MATH 181	4 <input type="checkbox"/>		
Second Semester	Completed	Fourth Semester	Completed
General Education		General Education	
Course	3 <input type="checkbox"/>	Courses	9 <input type="checkbox"/>
CHEM 122	4 <input type="checkbox"/>	Program Elective	4 <input type="checkbox"/>
MATH 182	4 <input type="checkbox"/>		
PHYS 180	3 <input type="checkbox"/>		
PHYS 180L	1 <input type="checkbox"/>		

### ASSOCIATE OF SCIENCE CHEMISTRY - Mission & Outcomes

**Mission:** To prepare students for baccalaureate programs in the science, health, teaching, and engineering fields, or the work force in chemistry-related industries.

#### Student Learning Outcomes:

- Have the ability to design and conduct laboratory experiments, as well as analyze and interpret data.
- Be able to demonstrate an introductory level of knowledge in:
  - principles of general & organic chemistry with applications to biological systems
  - general and organic chemistry with applications to biological systems.
- Be able to use mathematics and computers to solve chemistry problems.
- Be able to demonstrate an understanding of the scientific method.
- Be capable of applying safety standards when using laboratory chemicals, equipment, and instruments.



# ACADEMIC DEGREES

## COMPUTER AND OFFICE TECHNOLOGY

### *Associate of Applied Science*

The Computer and Office Technology emphasis is designed for those seeking specific career skills in office environments. The program will prepare students with the necessary skills for entry level employment in a professional business office environment using current software applications. Some courses can transfer to baccalaureate programs.

**Salary:** \$29,331–\$52,157 / year (Nevada)

**Career Outlook:** Variable; rapid growth in temporary worker agencies

**Good To Know:** Good communication skills critical; use computers heavily; may supervise office staff

**WNC Academic Division:** Business and Computer Technology

**Total Requirements:** 60 credits

**Degree Requirements** 21 Credits

Strongly recommend 40 wpm typing skills for successful degree completion.

ACC 135B	Bookkeeping I	3
or ACC 201	Financial Accounting	
BUS 110B	Human Relations For Employment	3
or MGT 212	Leadership & Human Relations	
or MGT 201	Principles of Management	
COT 200	Beginning Word Processing	3
or COT 216	Intermediate Word Processing	
COT 204	Using Windows	3
COT 262	Intermediate Spreadsheets Concepts	3
IS 101	Introduction to Information Systems	3
IS 201	Computer Applications	3

**Program Requirements** 18 Credits

**Choose a total of 18 credits from any of the following courses:**

ACC 223B	Introduction to QuickBooks	3
BUS 112B	Customer Service	3
CIT 151	Beginning Web Development	3
or GRC 175	Web Design and Publishing I	
CIT 152	Web Script Language Programming	3
COT 101	Computer Keyboarding I	3
or COT 102	Computer Keyboarding II	
COT 222	Desktop Publishing With Word Processing	3
COT 223	Advanced Desktop Publishing	3
COT 266	Intermediate Database Concepts	3
GRC 118	Computer Graphics - Print Media	3
GRC 119	Computer Graphics - Digital Media	3
GRC 183	Electronic Imaging	3
or ART 243	Digital Imaging I	
GRC 283B	Electronic Imaging	3
or ART 244	Digital Imaging II	
MKT 210	Marketing Principles	3

Students interested in Desktop Publishing skills should include in their choices:

COT 222, COT 223, GRC 118, GRC 183 OR ART 243, GRC 283B OR ART 243, & MKT 210

Students interested in Web Design skills should include in their choices:

CIT 151 OR GRC 175, CIT 152 & GRC 119

Students interested in Computer Applications skills should include in their choices:

COT 266, BUS 112B, ACC 223B, COT 101 OR COT 102

### General Education Requirements

21 Credits

English/Communications Requirement: Recommended: BUS 107, BUS 108;

Must include a writing course 6

Humanities/Social Science Requirements 3

Mathematics Requirement: Recommended: BUS 109B 3

Science Requirement 3

U.S. and Nevada Constitution Requirements 3

General Electives 3

*A list of all courses filling general education requirements for the Associate of Applied Science can be found on the Associate of Applied Science page.*

### COMPUTER AND OFFICE TECHNOLOGY - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
Mathematics Course	3 <input type="checkbox"/>	Humanities/Social Science	
English Course	3 <input type="checkbox"/>	Course	3 <input type="checkbox"/>
ACC 135B or ACC 201	3 <input type="checkbox"/>	U.S./Nevada Constitution	3 <input type="checkbox"/>
IS 101	3 <input type="checkbox"/>	BUS 110B	3 <input type="checkbox"/>
Program Elective	3 <input type="checkbox"/>	COT 200	3 <input type="checkbox"/>
		Program Elective	3 <input type="checkbox"/>
Second Semester	Completed	Fourth Semester	Completed
English Course	3 <input type="checkbox"/>	General Elective	3 <input type="checkbox"/>
COT 204	3 <input type="checkbox"/>	COT 262	3 <input type="checkbox"/>
IS 201	3 <input type="checkbox"/>	Program Elective	9 <input type="checkbox"/>
Program Elective	3 <input type="checkbox"/>		
Science Course	3 <input type="checkbox"/>		

### ASSOCIATE OF APPLIED SCIENCE

#### COMPUTER AND OFFICE TECHNOLOGY - Mission & Outcomes

**Mission:** The purpose of the Associate of Applied Science degree in Computer & Office Technology is to provide employment-related knowledge and skills necessary to succeed in a chosen field of computer technology and/or applications study.

**Student Learning Outcomes:** Students who complete programs in occupational areas are expected to demonstrate that they:

Know:

- practices and procedures required for entry level employment
- entry level skill set, and
- the theoretical principles relevant to their field of study

Are able to:

- test successfully on competencies required to pass industry standard certification exams
- communicate effectively and appropriately, in oral and written form
- locate, evaluate and properly utilize the tools & resources appropriate to a
- computer technology professional
- acquire skills and perform tasks necessary for employment or career enhancement
- demonstrate effective communication and computation skills appropriate to the chosen occupational field

Appreciate and value:

- appropriate and effective presentation of themselves to potential employers
- standards of social, ethical, legal, accessibility, and diversity issues of their work environment



# ACADEMIC DEGREES

## COMPUTER SCIENCE

### Associate of Science

The Associate of Science degree in Computer Science will prepare students for transfer to a university, particularly the University of Nevada, Reno. It will provide students with a breadth of knowledge commonly accepted as necessary for a degree in the field of Computer Science. In addition, the degree core requirements also provide a depth of knowledge in several key areas of the computer science field, for students seeking entry-level employment in the growing field of computing and information sciences.

**Salary:** \$45,000–\$69,600 / year (Nevada)

**Career Outlook:** Much faster than average growth through 2014

**Good To Know:** Bachelor's degree required for most systems analysts

**WNC Academic Division:** Science, Mathematics & Engineering

**Total Requirements:** 64 credits

Emphasis Requirements		40 Credits
CHEM 121	General Chemistry I	4
CIT 130	Beginning Java	3
CIT 260	Systems Analysis and Design I	3
CPE 201	Introduction to Computer Engineering	4
CS 135	Computer Science I	3
CS 202	Computer Science II	3
MATH 181	Calculus I	4
MATH 182	Calculus II	4
MATH 283	Calculus III	4
PHYS 180	Engineering Physics I	3
PHYS 180L	Engineering Physics I Lab	1
PHYS 181	Engineering Physics II	3
PHYS 181L	Engineering Physics II Lab	1

General Education Requirements		24 Credits
English/Communications Requirements: Recommended: ENG 101, ENG 102		6
Fine Arts Requirements		3
Humanities Requirements		6
Social Sciences Requirements		6
U.S. and Nevada Constitution Requirements		3

*A list of all courses filling general education requirements for the Associate of Science can be found on the Associate of Science page.*

## ASSOCIATE OF SCIENCE - COMPUTER SCIENCE

### Mission & Outcomes

**Mission:** The purpose of the Associate of Science in Computer Science degree is to prepare students with the necessary skills for transfer to a four-year university, in particular, University of Nevada, Reno. The degree is designed in such a manner as to provide students who do not have plans to continue on to a four-year university, the ability to obtain entry-level employment in the growing field of computing and information science.

**Student Learning Outcomes:** Students who complete programs in this academic area are expected to demonstrate that they

Know:

- practices and procedures required for transfer to a four-year institution
- entry-level skill set
- theoretical principles relevant to their field of study

Are able to:

- test successfully on competencies required to pass rigorous academic examinations of their skill level
- communicate effectively and appropriately, in oral and written form,
- locate, evaluate and properly utilize the tools and resources appropriate to a computer science professional
- acquire skills and perform tasks necessary for academic advancement
- demonstrate effective communication and computation skills appropriate to the chosen academic discipline
- demonstrate the ability to obtain requirements, design, implement, test, debug and maintain computer programs in at least two computer programming languages

Appreciate and Value:

- appropriate and effective presentation of themselves to potential employers
- standards of social, ethical, legal, accessibility and diversity issues of their work environment

### COMPUTER SCIENCE - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
General Education Courses	6 <input type="checkbox"/>	CS 135	3 <input type="checkbox"/>
CHEM 121	4 <input type="checkbox"/>	General Education Courses	3 <input type="checkbox"/>
CIT 130	3 <input type="checkbox"/>	MATH 283	4 <input type="checkbox"/>
MATH 181	4 <input type="checkbox"/>	PHYS 181	3 <input type="checkbox"/>
		PHYS 181L	1 <input type="checkbox"/>
Second Semester	Completed		
CIT 260	3 <input type="checkbox"/>	Fourth Semester	Completed
General Education Courses	6 <input type="checkbox"/>	General Education Courses	9 <input type="checkbox"/>
MATH 182	4 <input type="checkbox"/>	CPE 201	4 <input type="checkbox"/>
PHYS 180	3 <input type="checkbox"/>	CS 202	3 <input type="checkbox"/>
PHYS 180L	1 <input type="checkbox"/>		





# ACADEMIC DEGREES

## COMPUTER TECHNOLOGY PROGRAMS

WNC's Computer Technology programs are designed to offer students access to the rapidly changing and growing opportunities in the computer and information technology career field.

*The college offers Associate of Applied Science degrees:*

- Computer Networking Technology
- Information Technology

*The college offers Certificates of Achievement:*

- Computer Applications
- Network Support Technician
- System Administration Technician

Students also have the opportunity to achieve industry certification through nationally available testing programs.

## COMPUTER TECHNOLOGY

### *Computer Applications Certificate of Achievement*

The Computer Applications Certificate is designed for students seeking training and careers in the field area of administrative/executive assistant, office employee, or data entry.

#### **WNC Academic Division: Business and Computer Technology**

**Total Requirements:** 30 credits

<b>Subject Requirements</b>		15 Credits
ACC 135B or ACC 201	Bookkeeping I Financial Accounting	3
COT 101 or COT 102 or COT 200 or COT 216	Computer Keyboarding I Computer Keyboarding II Beginning Word Processing Intermediate Word Processing	3
COT 204	Using Windows	3
IS 101	Introduction to Information Systems	3
IS 201	Computer Applications	3

**Choose six credits from the following classes:**

ACC 223B	Introduction to QuickBooks	3
BUS 112B	Customer Service	3
CIT 151	Beginning Web Development	3
or GRC 175	Web Design and Publishing I	
COT 200 or COT 216	Beginning Word Processing Intermediate Word Processing	3
COT 222	Desktop Publishing With Word Processing	3
COT 223	Advanced Desktop Publishing	3
COT 262	Intermediate Spreadsheets Concepts	3
COT 266	Intermediate Database Concepts	3

#### **General Education Requirements**

9 Credits

English/Communications Requirements: Recommended: BUS 108;

Must include a writing course 3

Human Relations Requirement: Recommended: BUS 110B 3

Mathematics Requirement: Recommended: BUS 109B 3

*A list of all courses filling general education requirements for the Certificate of Achievement can be found on the Certificate of Achievement page.*

#### COMPUTER APPLICATIONS - Suggested Course Sequence

First Semester	Completed	Second Semester	Completed
English Course	3 <input type="checkbox"/>	Mathematics Course	3 <input type="checkbox"/>
ACC 135B	3 <input type="checkbox"/>	General Education Course	3 <input type="checkbox"/>
COT 101	3 <input type="checkbox"/>	COT 204	3 <input type="checkbox"/>
IS 101	3 <input type="checkbox"/>	IS 201	3 <input type="checkbox"/>
Program Elective	3 <input type="checkbox"/>	Program Elective	3 <input type="checkbox"/>

#### **CERTIFICATE OF ACHIEVEMENT - COMPUTER TECHNOLOGY COMPUTER APPLICATIONS - Mission & Outcomes**

**Mission:** The purpose of the Certificate in Computer Applications in business is to provide the knowledge and skills necessary to succeed in the current business environment.

#### **Student Learning Outcomes:**

- Provide employment related knowledge and skills.
- Know subject matter appropriate to emphasis of certificate.
- Understanding of software applications and its importance to the business environment.
- Demonstrate oral, written, and computational skills.
- Develop, create, and modify general computer applications software or specialized utility programs.
- Apply project management principles to software projects.



# ACADEMIC DEGREES

## COMPUTER TECHNOLOGY

### *Computer Networking Technology Associate of Applied Science*

The Computer Networking Technology program is designed for students seeking career skills in computer networking environments. Students choose one of three specializations to customize their program: Network Technology Management, Security and Information Assurance, or Transfer Option.

**Salary:** \$49,990–\$91,807 / year (Nevada)

**Career Outlook:** Much faster than average growth through 2014

**Good To Know:** Businesses & government are investing heavily in 'cyber-security'

**WNC Academic Division:** Business and Computer Technology

**Total Requirements:** 60-61 credits

Program Requirements		35-37 Credits
CIT 161B	Essentials of Information Security	3
CIT 211	Microsoft Networking I	4
CIT 212	Microsoft Networking II	4
CIT 263B	Introduction To IT Project Management	3
CISCO 120B	CISCO Internetworking Academies I	4
CISCO 121B	CISCO Internetworking Academies II	4
CISCO 130B	Fundamentals of Wireless LANs	4
MGT 201	Principles of Management	3
or MGT 212	Leadership & Human Relations	
or MGT 283	Introduction to Human Resources Management	

### Choose two courses from the following:

CIT 173	Linux Installation and Configuration	3
CIT 174	Linux System Administration	3
CIT 213	Microsoft Networking III	4
CIT 214	Microsoft Networking IV	4
CIT 215	Microsoft Networking V	4
CISCO 220B	CISCO Internetworking Academies III	4
CISCO 221B	CISCO Internetworking Academies IV	4

### General Education Requirements

24-25 Credits

English/Communications Requirement: Recommended: BUS 107&108;

Must include a writing course	6
Human Relations Requirement	3
Humanities/Social Science Requirements	3
Mathematics Requirement: Recommended: MATH 126 or higher	3
Science Requirement	6
U.S. and Nevada Constitution Requirements	3
General Electives	0-1

A list of all courses filling general education requirements for the Associate of Applied Science can be found on the Associate of Applied Science page.

## ASSOCIATE OF APPLIED SCIENCE - COMPUTER TECHNOLOGY

### Mission & Outcomes

**Mission:** The purpose of the Associate of Applied Science degree in Computer Networking Technology is to provide graduates with up-to-date training in the management of information resources, including computer and networking operations, infrastructure and information security.

**Student Learning Outcomes:** Students who complete programs in occupational areas are expected to demonstrate that they know:

- practices and procedures required for entry level employment
- entry level skill set
- theoretical principles relevant to their emphasis

Are able to:

- test successfully on competencies required to pass industry standard certification exams
- communicate effectively and appropriately, in oral and written form
- locate, evaluate and properly utilize the tools and resources appropriate to a computer technology professional
- acquire skills and perform tasks necessary for employment or career enhancement
- demonstrate effective communication and computation skills appropriate to the chosen occupational field

Appreciate and value:

- appropriate and effective presentation of themselves to potential employers
- standards of social, ethical, legal, accessibility, and diversity issues of their work environment

## COMPUTER TECHNOLOGY - COMPUTER NETWORKING TECHNOLOGY

### Suggested Course Sequence

First Semester		Third Semester	
English Course	Completed	Science Course	Completed
Math Course	3 <input type="checkbox"/>	Social Science/	3 <input type="checkbox"/>
CIT 211 or CSCO 120B	3 <input type="checkbox"/>	Humanities Course	3 <input type="checkbox"/>
CIT 212 or CSCO 121B	4 <input type="checkbox"/>	CIT 211 or CSCO 120B	4 <input type="checkbox"/>
		CIT 212 or CSCO 121B	4 <input type="checkbox"/>
		CIT 263B	3 <input type="checkbox"/>
Second Semester		Fourth Semester	
Networking Electives	Completed	General Elective	Completed
English Course	6-8 <input type="checkbox"/>	US/Nev. Constitution	0-1 <input type="checkbox"/>
CIT 165B	3 <input type="checkbox"/>	Science Course	3 <input type="checkbox"/>
		CISCO 130B:	3 <input type="checkbox"/>
		Human Relations Course	3 <input type="checkbox"/>
		MGT 201, MGT 212,	3 <input type="checkbox"/>
		or MGT 283	3 <input type="checkbox"/>

# ACADEMIC DEGREES

## COMPUTER TECHNOLOGY

### *Information Technology Associate of Applied Science*

When computer and communications technologies are combined, the result is Information Technology! The Information Technology degree is designed to prepare students to perform a variety of duties ranging from installing applications to designing complex computer networks and maintaining information systems. Systems administrators can work in a variety of environments including manufacturing, health care, education, or state and local government agencies. Every business has some kind of IT needs, and a graduate of this program will have a broad base of theory in and hands-on practice with many aspects of technology, especially the use of electronic devices and computer software to convert, store, protect, process, transmit, and retrieve information.

**Salary:** \$27,363–\$83,890 / year (U.S.)

**Career Outlook:** Much faster than average growth through 2014

**Good To Know:** Offers broad career opportunities & room for advancement

**WNC Academic Division:** Business and Computer Technology

**Total Requirements:** 60 credits

**Core Requirements** 39 Credits

CIT 161B	Essentials of Information Security	3
CIT 165B	Introduction to Convergence	3
CIT 211	Microsoft Networking I	4
CIT 212	Microsoft Networking II	4
CSCO 120B	CISCO Internetworking Academies I	4
CSCO 121B	CISCO Internetworking Academies II	4
ET 131B	Electronics I	4
ET 155B	Home Technology Convergence	4
ET 265B	Fundamentals of Telecommunications	3

**Choose at least 6 credits from the following convergence electives:**

CIT 213	Microsoft Networking III	4
CIT 214	Microsoft Networking IV	3-6
CIT 215	Microsoft Networking V	3-6
CIT 263B	Introduction To IT Project Management	3
CIT 269B	Advanced Convergence	4
CSCO 220B	CISCO Internetworking Academies III	4
CSCO 221B	CISCO Internetworking Academies IV	4
CSCO 130B	Fundamentals of Wireless LANs	3
ET 132B	Electronics II	3
ET 198B	Special Topics in Electronics	4
ET 200B	Electronics Projects	4

**General Education Requirements**

21 Credits

English/Communications Requirement: Recommended: BUS 107 & 108;

Must include a writing course	6
Human Relations Requirement	3
Humanities/Social Science Requirements	3
Mathematics Requirement	3
Science Requirement	3
U.S. and Nevada Constitution Requirements	3

*A list of all courses filling general education requirements for the Associate of Applied Science can be found on the Associate of Applied Science page.*

### COMPUTER TECHNOLOGY - INFORMATION TECHNOLOGY Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
BUS 107	3 <input type="checkbox"/>	CIT 211	4 <input type="checkbox"/>
CSCO 120B	4 <input type="checkbox"/>	CIT 212	4 <input type="checkbox"/>
CSCO 121B	4 <input type="checkbox"/>	ET 155B	4 <input type="checkbox"/>
ET 131B	4 <input type="checkbox"/>	Social Science/ Humanities Course	3 <input type="checkbox"/>
Second Semester	Completed	Fourth Semester	Completed
BUS 108	3 <input type="checkbox"/>	Science Course	3 <input type="checkbox"/>
CIT 129	3 <input type="checkbox"/>	ET 265B	3 <input type="checkbox"/>
CIT 165B	3 <input type="checkbox"/>	Human Relations Course	3 <input type="checkbox"/>
MATH Course	3 <input type="checkbox"/>	Program Elective	6 <input type="checkbox"/>
Program Elective	3 <input type="checkbox"/>	US/Nev. Constitution	3 <input type="checkbox"/>

### ASSOCIATE OF APPLIED SCIENCE - INFORMATION TECHNOLOGY Mission & Outcomes

**Mission:** The purpose of the Associate of Applied Science degree in Information Technology is to provide employment-related knowledge and skills necessary to succeed in a chosen field of study.

**Student Learning Outcomes:** Students who complete programs in occupational areas are expected to demonstrate that they know:

- the subject matter appropriate to the emphasis of the degree

Are able to:

- communicate effectively and appropriately, in oral and written form,
- locate, evaluate and properly utilize the tools and resources appropriate to a computer technology professional,
- acquire skills and perform tasks necessary for employment or career enhancement

Have developed:

- an appreciation of the importance of social, ethical, legal and diversity issues
- an appreciation of the need and importance of lifelong learning



**ACADEMIC DEGREES****COMPUTER TECHNOLOGY***Network Support Technician Certificate of Achievement***Salary:** \$50,923–\$83,890/ year (Nevada)**Career Outlook:** Growth will be much faster than average through 2014**Good To Know:** WNC is a CISCO Regional Academy. Companies will continue to invest heavily in their computer systems because of productivity gains and investment returns.**WNC Academic Division:** Business and Computer Technology**Total Requirements:** 33 – 35 credits

<b>Subject Requirements</b>		26 Credits
CIT 161B	Essentials of Information Security	3
CIT 263B	Introduction To IT Project Management	3
CSCO 120B	CISCO Internetworking Academies I	4
CSCO 121B	CISCO Internetworking Academies II	4
CSCO 130B	Fundamentals of Wireless LANs	4
CSCO 220B	CISCO Internetworking Academies III	4
CSCO 221B	CISCO Internetworking Academies IV	4

**General Education Requirements**

7-9 Credits

English/Communications Requirements: Must include a writing course	3
Human Relations Requirement	1-3
Mathematics Requirement	3

*A list of all courses filling general education requirements for the Certificate of Achievement can be found on the Certificate of Achievement page.*

**COMPUTER TECHNOLOGY - NETWORK SUPPORT TECHNICIAN****Suggested Course Sequence**

First Semester	Completed	Second Semester	Completed
English Course	3 <input type="checkbox"/>	Human Relation Course	1-3 <input type="checkbox"/>
Mathematics Course	3 <input type="checkbox"/>	CIT 161B	3 <input type="checkbox"/>
CIT 263B	3 <input type="checkbox"/>	CSCO 130B	4 <input type="checkbox"/>
CSCO 120B	4 <input type="checkbox"/>	CSCO 220B	4 <input type="checkbox"/>
CSCO 121B	4 <input type="checkbox"/>	CSCO 221B	4 <input type="checkbox"/>

**CERTIFICATE OF ACHIEVEMENT - COMPUTER TECHNOLOGY  
NETWORK TECHNICIAN - Mission & Outcomes**
**Mission:** The purpose of the Network Support Technician certificate is to provide students with the knowledge and skills needed to succeed in their chosen careers.**Student Learning Outcomes:** Students in the Computer Technologies Certificate programs are expected to:**Know:**

- the competencies required to successfully pass information technology certification exams.

**Are able to:**

- demonstrate the skills and competencies required of professionals in the information technology industry in real-world practice.
- communicate effectively and appropriately, in oral and written form, with employees, colleagues and lay people.
- locate, evaluate and properly utilize the tools and resources appropriate to an information technology professional.

**Appreciate:**

- the need for continuing education and life long learning.

**COMPUTER TECHNOLOGY***System Administration Technician Certificate of Achievement***Salary:** \$64,945–\$102,818 / year (Nevada)**Career Outlook:** Faster than average growth through 2014**Good To Know:** Administrators design, install & support networks. Major employers include systems design firms, business management companies, colleges/universities, and government agencies.**WNC Academic Division:** Business and Computer Technology**Total Requirements:** 33 – 35 credits

<b>Subject Requirements</b>		26 Credits
CIT 161B	Essentials of Information Security	3
CIT 211	Microsoft Networking I	4
CIT 212	Microsoft Networking II	4
CIT 213	Microsoft Networking III	4
CIT 214	Microsoft Networking IV	4
CIT 215	Microsoft Networking V	4
or CIT 165B	Introduction to Convergence	
or ET 155B	Home Technology Convergence	
CIT 263B	Introduction To IT Project Management	3

**General Education Requirements**

7-9 Credits

English/Communications Requirements: Must include a writing course	3
Human Relations Requirement	1-3
Mathematics Requirement	3

*A list of all courses filling general education requirements for the Certificate of Achievement can be found on the Certificate of Achievement page.*

**COMPUTER TECHNOLOGY - SYSTEM ADMINISTRATION TECHNICIAN****Suggested Course Sequence**

First Semester	Completed	Second Semester	Completed
English Course	3 <input type="checkbox"/>	Human Relation Course	1-3 <input type="checkbox"/>
Mathematics Course	3 <input type="checkbox"/>	CIT 161B	3 <input type="checkbox"/>
CIT 211	4 <input type="checkbox"/>	CIT 213	4 <input type="checkbox"/>
CIT 212	4 <input type="checkbox"/>	CIT 214	4 <input type="checkbox"/>
CIT 263B	3 <input type="checkbox"/>	CIT 215	4 <input type="checkbox"/>

**CERTIFICATE OF ACHIEVEMENT - COMPUTER TECHNOLOGY  
SYSTEM ADMINISTRATION TECHNICIAN - Mission & Outcomes**
**Mission:** The purpose of the System Administration Technician certificate is to provide students with the knowledge and skills needed to succeed in their chosen careers.**Student Learning Outcomes:** Students in the Computer Technologies Certificate programs are expected to:**Know:**

- the competencies required to successfully pass information technology certification exams

**Are able to:**

- demonstrate the skills and competencies required of professionals in the information technology industry in real-world practice
- communicate effectively and appropriately, in oral and written form, with employees, colleagues and lay people
- locate, evaluate and properly utilize the tools and resources appropriate to an information technology professional

**Appreciate:**

- the need for continuing education and life long learning





# ACADEMIC DEGREES

## CONSTRUCTION TECHNOLOGY PROGRAM

The Construction Technology program prepares students for careers within the various construction industry disciplines. As construction technology students will possess a diversity of work experiences, skills and interests, the program accommodates a variety of study areas and competency levels to address student and industry needs.

The college offers both an associate degree and a new bachelor's degree in the field.

*The program offers instruction which is critical to preparing skilled employees in the following areas:*

- Construction Project Management
- Construction Management

*The college also offers classes toward licensure in:*

- Certified Inspector of Structures

Students must meet with a counselor and be admitted into the Construction Management program prior to enrolling in upper division courses.

Deborah Case, BTech Advisor: 775-445-3270 or cased3@wnc.edu

### ASSOCIATE OF APPLIED SCIENCE - CONSTRUCTION TECHNOLOGY

#### Mission & Outcomes

**Mission:** The mission of the Associate of Applied Science degree in Construction Technology is to prepare students for entry level and mid-level positions within the various construction industry disciplines.

**Student Learning Outcomes:** Expectations for students completing the Construction Technology curriculum are as follows:

#### Construction Project Management

- Know the tasks, responsibilities, and industry standards of the various trades,
- Understand the responsibilities of subcontractors, general contractors, superintendents, project managers, architects and engineers
- Demonstrate the ability to communicate with the above entities per industry standards
- Demonstrate the ability to produce a construction schedule
- Understands the implementation and coordination of a construction schedule
- Demonstrate the ability to write construction contracts per industry standards
- Demonstrate an understanding of construction law
- Utilize the various resources available to explore new construction methods and insure quality control
- Demonstrate the ability to favorably represent himself or herself to a potential employer.

#### Certified Inspector of Structures

- Demonstrate an understanding of all components within a certified inspection
- Demonstrate the ability to conduct a certified inspection per NRS 645D
- Demonstrate the ability to produce a credible, professional report consistent with NRS 645D
- Successfully complete the state of Nevada examination for Certified Inspector of S1 Structures-Residential.

## CONSTRUCTION TECHNOLOGY

*Construction Project Management Associate of Applied Science*

The Construction Project Management emphasis provides management training that addresses topics of critical importance to subcontractors, general contractors, superintendents and project managers. Students will study contract administration, coordination, negotiation, quality control and the management of labor resources, equipment and materials.

**Salary:** \$45,800–\$68,200 / year (Nevada)

**Career Outlook:** Faster than average growth through 2014

**Good To Know:** About 47 percent are self-employed.

**WNC Academic Division:** Technology

**Total Requirements:** 61 credits

#### Core Requirements

		13 Credits
BI 101B	Introduction to Building Codes	3
CONS 108B	Construction Materials and Methods	3
CONS 120B	Blueprint Reading and Specification	3
CONS 121B	Principles of Construction Estimating	3
CONS 205B	Construction Site Safety	1

#### Emphasis Requirements

		24 Credits
AC 198B	Special Topics in HVAC	2
CONS 114B	Soils, Sitework, Concrete and Testing	3
CONS 116B	Plumbing Principles and Methods	2
CONS 118B	Construction Contract Documents	3
CONS 216B	Structural Layout Assembly	2
CONS 230B	Electrical Distribution System	2
CONS 281B	Construction Planning Scheduling And Control	3
CONS 290B	Internship in Construction	3
SUR 161	Elementary Surveying	4
or SUR 265	Introduction to Construction Surveying	

#### General Education Requirements

		24 Credits
English/Communications Requirement: Recommended: BUS 107, BUS 108		6
Human Relations Requirement: Recommended: BUS 110B		3
Humanities/Social Science Requirements		3
Mathematics Requirement: Recommended: MATH 110B		3
Science Requirement: Recommended: PHYS 100		6
U.S. and Nevada Constitution Requirements		3

*A list of all courses filling general education requirements for the Associate of Applied Science can be found on the Associate of Applied Science page.*

### CONSTRUCTION TECHNOLOGY - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
BUS 107	3 <input type="checkbox"/>	CONS 116B	2 <input type="checkbox"/>
CONS 108B	3 <input type="checkbox"/>	CONS 118B	3 <input type="checkbox"/>
CONS 120B	3 <input type="checkbox"/>	CONS 216B	2 <input type="checkbox"/>
MATH 110B	3 <input type="checkbox"/>	CONS 281B	3 <input type="checkbox"/>
U.S./Nevada Constitution	3 <input type="checkbox"/>	PHYS 100	3 <input type="checkbox"/>
		SUR 119B	4 <input type="checkbox"/>
Second Semester	Completed	Fourth Semester	Completed
Humanities/ Social Science Course	3 <input type="checkbox"/>	AC 198B	2 <input type="checkbox"/>
BI 101B	3 <input type="checkbox"/>	BUS 110B	3 <input type="checkbox"/>
BUS 108	3 <input type="checkbox"/>	CONS 114B	3 <input type="checkbox"/>
CONS 121B	3 <input type="checkbox"/>	CONS 230B	2 <input type="checkbox"/>
CONS 205B	1 <input type="checkbox"/>	CONS 290B	3 <input type="checkbox"/>
CONS 282B	2 <input type="checkbox"/>	Science Course	3 <input type="checkbox"/>



# ACADEMIC DEGREES

## CONSTRUCTION MANAGEMENT

### *Bachelor of Technology*

The Bachelor of Technology degree in Construction Management provides associate degree students, new students and skilled workers an educational route toward a career as a construction manager or supervisor. The 128-credit program combines knowledge in construction methods, planning and project management with business and supervisory skills. This program allows those who have completed an associate degree in construction technology to progress academically and earn a bachelor's degree. It also allows those already working in the construction field to enroll in an applicable baccalaureate degree program and expand career advancement possibilities. Students must meet with a counselor and be admitted into the program.

**Information** ..... 775-445-3267

**Salary:** \$65,456–\$115,538 / year (Nevada)

**Career Outlook:** Average growth through 2014.

**Good To Know:** Construction managers are in charge of construction projects, such as buildings, roads or bridges. Those with a bachelor's degree have a better chance of finding jobs and earning higher pay.

**WNC Academic Division:** Technology

**Total Requirements:** 128 credits

<b>Business Core</b>		18 Credits
ACC 201	Financial Accounting	3
ECON 102	Principles of Microeconomics	3
ECON 103	Principles of Macroeconomics	3
ECON 261	Principles of Statistics I	3
MGT 323	Organizational Behavior and Interpersonal Behavior	3
MGT 367	Human Resource Management	3

<b>Construction Core Requirements</b>		62 Credits
AC 198B	Special Topics in HVAC	2
BI 101B	Introduction to Building Codes	3
CADD 100	Introduction to Computer Aided Drafting	3
CEE 411	Environmental Law	3
CEE 462	Construction Cost Estimating	3
CEE 463	Project Scheduling	3
CEE 464	Construction Law*	2
CEE 465	Construction Cost Accounting	2
CEE 466	Construction Management	2
CEE 495	Special Topics	3
CONS 108B	Construction Materials and Methods	3
CONS 114B	Soils, Sitework, Concrete and Testing	3
CONS 116B	Plumbing Principles and Methods	2
CONS 118B	Construction Contract Documents	3
CONS 120B	Blueprint Reading and Specification	3
CONS 121B	Principles of Construction Estimating	3
CONS 205B	Construction Site Safety	1
CONS 216B	Structural Layout Assembly	2
CONS 230B	Electrical Distribution System	2
CONS 281B	Construction Planning Scheduling And Control	3
CONS 351	Advanced Project Supervision	5
CONS 451	Advanced Internship in Construction	2
SUR 161	Elementary Surveying	4
or SUR 265	Introduction to Construction Surveying	

\* CONS 282B - Construction Law, will be accepted in lieu of CEE 464

<b>General Education Requirements</b>		48 Credits
Capstone Courses		9
English/Communications Requirements		9–11
Fine Arts Requirement		3
Humanities Requirement		3
Mathematics and Science Requirements		15
Social Sciences Requirement		6
U.S. and Nevada Constitution Requirements		3–6

A list of all courses filling general education requirements for the Bachelor of Technology can be found on the Bachelor of Technology page.

### Bachelor of Technology in Construction Management Admission Requirements

To be accepted into the program, a student must:

- Complete a minimum of 45 college credits or equivalent with a minimum 2.0 GPA.  
Within the 45 credits:
  - A minimum of 12 credits must be in applicable construction courses. This requirement may be waived if the student has construction experience.
  - A minimum of 15 credits must be in applicable general education classes, including English 101.
 OR:  
Have an associate degree in Construction Management from a regionally accredited institution.
- Meet with a WNC counselor.

### CONSTRUCTION MANAGEMENT - Suggested Course Sequence

First Semester	Completed	Fifth Semester	Completed
U.S./Nevada Constitution	3 <input type="checkbox"/>	Math/Science Course	3 <input type="checkbox"/>
CONS 108B	3 <input type="checkbox"/>	CEE 411	3 <input type="checkbox"/>
CONS 120B	3 <input type="checkbox"/>	CEE 462	3 <input type="checkbox"/>
ECON 102	3 <input type="checkbox"/>	CONS 351	5 <input type="checkbox"/>
ENG 101	3 <input type="checkbox"/>	MGT 323	3 <input type="checkbox"/>
MATH 126	3 <input type="checkbox"/>		
Second Semester	Completed	Sixth Semester	Completed
English/Comm Course	3 <input type="checkbox"/>	Capstone Course	3 <input type="checkbox"/>
BI 101B	3 <input type="checkbox"/>	Social Science Course	3 <input type="checkbox"/>
CADD 100	3 <input type="checkbox"/>	CEE 463	3 <input type="checkbox"/>
CONS 114B	3 <input type="checkbox"/>	CONS 451	2 <input type="checkbox"/>
ECON 103	3 <input type="checkbox"/>	MGT 367	3 <input type="checkbox"/>
MATH 127	3 <input type="checkbox"/>		
Third Semester	Completed	Seventh Semester	Completed
CONS 116B	2 <input type="checkbox"/>	Capstone Course	3 <input type="checkbox"/>
CONS 216B	3 <input type="checkbox"/>	Fine Arts Course	3 <input type="checkbox"/>
CONS 281B	3 <input type="checkbox"/>	Social Science Course	3 <input type="checkbox"/>
ECON 261	3 <input type="checkbox"/>	CEE 465	2 <input type="checkbox"/>
PHYS 100	3 <input type="checkbox"/>	CEE 466	2 <input type="checkbox"/>
SUR 161 or SUR 265	4 <input type="checkbox"/>		
Fourth Semester	Completed	Eighth Semester	Completed
Math/Science Course	3 <input type="checkbox"/>	Capstone Course	3 <input type="checkbox"/>
AC 198B	2 <input type="checkbox"/>	English/Comm Course	3 <input type="checkbox"/>
ACC 201	3 <input type="checkbox"/>	Humanities Course	3 <input type="checkbox"/>
CONS 118B	3 <input type="checkbox"/>	CEE 464	2 <input type="checkbox"/>
CONS 121B	3 <input type="checkbox"/>	CEE 495	3 <input type="checkbox"/>
CONS 205B	1 <input type="checkbox"/>		
CONS 230B	2 <input type="checkbox"/>		



# ACADEMIC DEGREES

## Bachelor of Technology in Construction Management General Education Course List

### Capstone Course-9 credits. Choose from:

Communication: 412                      Economics: 334, 365  
Construction Management: 456                      Management: 462, 469

### English/Communications Requirements-9-11 credits. Choose from:

Business: 107, or                      English: 100, or 101  
Communication: 113 or 213 or 215                      English: 102

### Fine Arts Requirement-3 credits. Choose from:

Art: 100, 101, 124, 160, 224, 260, 261                      Music, Ensemble: 101  
Dance: 101                      Music, General: 121  
Humanities: 101                      Theatre: 100, 105, 180

### Humanities Requirement-3 credits. Choose from:

Core Humanities: 201, 202  
English: 200, 223, 231, 232, 243, 250, 252, 261, 266, 267, 271, 275  
History: 105, 106, 207, 247  
Philosophy (except for PHIL 102, 105, 114)

### Mathematics and Science Requirements-15 credits. Choose from: *a minimum of 5 credits in mathematics and 7 credits in science.*

<b>Mathematics</b>	<b>Science</b>
Mathematics: 126 & 127, 128 or higher	Chemistry: 100, 121, 201
Statistics: 152	Environmental Studies: 100
	Geology: 100, 101, 103
	Physics: 100, 151, 180

### Social Sciences Requirement-6 credits. Choose from:

*3 credits must be an upper division course (300-400 level, see a counselor).*  
Anthropology: 101, 201, 202, 205, 210, 212  
Core Humanities: 203  
Criminal Justice: 101, 102, 220, 230, 270  
Geography: 106  
History: 101, 102, 111, 217, 295  
Journalism: 101  
Political Science: 103, 105, 108, 208, 231, 295, 299  
Psychology (except for PSY 210)  
Social Work: 220  
Sociology (except for SOC 210)

### U.S. and Nevada Constitution Requirements-3 or 6 credits. Choose from:

Core Humanities: 203  
History: 111, or  
History: 101 & 217, or  
History: 101 & 102, or  
Political Science: 103, or  
History and Political Science Combination (History 101, and, PSC 208)

## CONSTRUCTION TECHNOLOGY

*Certified Inspector of Structures - State of Nevada*

These licensing programs fulfill the minimum course requirements needed for licensure as a certified inspector of structures-residential. For more information please contact State of Nevada, Real Estate Division, or Bill Oney at 775-445-3353

**Salary:** \$46,226-\$75,506 / year (Nevada)

**Career Outlook:** Inspectors rarely are laid off when the economy slows down.

**WNC Academic Division:** Technology

### Total Requirements: 10 credits

License Requirements	10 Credits
CONS 260B	Certified Inspectors of Structures-Residential 3
CONS 261B	Under-Floor Inspections-Certified Inspector 1
CONS 262B	Above-Floor Inspections for Certified Inspector 2
CONS 263B	Supervised Residential Inspections for Certification 4

## BACHELOR OF TECHNOLOGY - CONSTRUCTION MANAGEMENT Mission & Outcomes

**Mission:** The mission of the Bachelor of Technology degree in Construction Management is to prepare students for entry level and mid-level positions within the various construction industry disciplines, and to meet the goals of the Division.

**Student Learning Outcomes:** Upon completing the Construction Management Bachelor of Technology program, students will be able to demonstrate:

- Knowledge in basic economic principals, business principals and construction accounting, finances, and law
- Exposure to the design theory and analysis of construction practices and systems
- Understanding of the utilization of available recourses for construction planning, methods and materials
- Understanding, skill and knowledge of construction documents, communications, graphics, and surveying
- Skill and knowledge in construction accounting, estimating and bidding practices
- Ability for planning and scheduling a construction project
- Application of relevant administrative skills, ethics, safety practices, and problem solving techniques to construction management



# ACADEMIC DEGREES

## CRIMINAL JUSTICE PROGRAM

WNC offers associate degrees and certificates of achievement in the field of criminal justice.

*Two-year associate degrees include:*

- Criminal Justice
- Criminal Justice Transfer Program
- Law Enforcement/Police Academy

*One-year certificate programs are offered in the following areas for students desiring more basic skills:*

- 9-1-1 Dispatch Telecommunications
- Law Enforcement/Academy

Criminal Justice programs are listed alphabetically.

Information, call . . . . . 775-445-4282

### CRIMINAL JUSTICE

*Associate of Applied Science*

The Criminal Justice Associate of Applied Science degree prepares students for a career in Law Enforcement, whether it be Probation and Parole, Corrections, Juvenile Justice or Law Enforcement. With this degree, students will understand the basics of criminal law and law enforcement pertaining to each of these career areas.

**Salary:** \$50,727–\$72,560 / year (Nevada)

**Career Outlook:** Average growth through 2014

**Good To Know:** Must be physically fit; may work weekends, holidays & nights

**WNC Academic Division:** Social Science, Education, Humanities & Public Service

**Total Requirements:** 60 credits

Core Requirements		18 Credits
CRJ 101	Introduction to Criminal Justice I	3
CRJ 102	Introduction to Criminal Justice II	3
CRJ 164	Principles of Investigation	3
CRJ 220	Criminal Procedures	3
CRJ 230	Criminal Law	3
CRJ 270	Introduction to Criminology	3

**Emphasis Requirements**

18 Credits

**Choose 9 credits from the following:**

CRJ 106	Introduction to Corrections	3
CRJ 155	Juvenile Justice System	3
CRJ 211	Police in America	3
CRJ 225	Criminal Evidence	3
CRJ 265	Introduction to Physical Evidence	3

**Choose 9 credits from the following:**

BUS 107	Business Speech Communications	3–6
or BUS 108	Business Letters and Reports	
COM 113	Fundamentals of Speech Communication	3
COT 105	Computer Literacy	3
or IS 201	Computer Applications	
CPD 116	Substance Abuse-Fundamental Facts	3
or CPD 117	Introduction to Counseling	
CRJ 295	Work Experience - Corrections	1–6
or CRJ 296	Work Experience - Juvenile Justice	
or CRJ 297	Work Experience - Law Enforcement	
or CRJ 298	Work Experience - Probation and Parole	
IS 101	Introduction to Information Systems	3
MGT 201	Principles of Management	3–6
or MGT 212	Leadership & Human Relations	
or MGT 235	Organizational Behavior	
or MGT 283	Introduction to Human Resources Management	
SW 220	Introduction to Social Work	3–6
or SW 230	Crisis Intervention	
Any Foreign Language		3–6
Any other Criminal Justice course except CRJ 110B		1–9
Any Psychology course except PSY 210		1–6
Any Sociology course except SOC 210		1–6

**General Education Requirements**

24 Credits

English/Communications Requirement: Recommended: ENG 101, ENG 102;	
Must be a writing course	6
Humanities/Social Science Requirements: Humanities Course Required	3
Mathematics Requirement	3
Science Requirement	3
U.S. and Nevada Constitution Requirements	3
General Electives	6

*A list of all courses filling general education requirements for the Associate of Applied Science can be found on the Associate of Applied Science page.*

Note: Students are REQUIRED to complete a POST certified course to become a law enforcement officer in Nevada. This degree does NOT replace that certification.

### ASSOCIATE OF APPLIED SCIENCE - CRIMINAL JUSTICE

#### Mission & Outcomes

**Mission:** The purpose of the Associate of Applied Science in Criminal Justice is to provide employment-related knowledge and skills necessary to succeed in a chosen field of study.

**Student Learning Outcomes:** Students who complete Associate of Applied Science in Criminal Justice are expected to demonstrate that they

- Meet the general education requirements of WNC
- Maintain the proper attitude for law enforcement
- Articulate the legal requirements of search and seizure
- Recognize and evaluate criminal law
- Process crime scenes
- Demonstrate the difference between juvenile and adult crime
- Analyze theories for committing crime





# ACADEMIC DEGREES

## CRIMINAL JUSTICE

### *Law Enforcement/Academy Associate of Applied Science*

The Law Enforcement Academy emphasis is designed to prepare students for various careers within the field of criminal justice. In Nevada, a Category I and III Post Certificate is necessary for most local and state jobs in the criminal justice field. This major, with the Western Nevada State Peace Officer Academy as the emphasis, allows a student to go right into a criminal justice career in Nevada

**Salary:** \$50,727–\$72,560 / year (Nevada)

**Career Outlook:** Average growth through 2014

**Good To Know:** Communication skills are important; may work weekends, holidays and nights. Good salaries and benefits

**WNC Academic Division:** Social Science, Education, Humanities & Public Service

**Total Requirements:** 63.5 credits

**Core Requirements** 18 Credits

CRJ 101	Introduction to Criminal Justice I	3
CRJ 102	Introduction to Criminal Justice II	3
CRJ 164	Principles of Investigation	3
CRJ 220	Criminal Procedures	3
CRJ 230	Criminal Law	3
CRJ 270	Introduction to Criminology	3

**Emphasis Requirements** 33.5 Credits

CRJ 103	Communication Within the Criminal Justice Field	3
CRJ 266B*	Western Nevada State Peace Officer Academy	27
EMS 100B	Healthcare Provider CPR	0.5
EMS 113B	First Responder	3

\* Spring and summer class that will fulfill the POST requirement

**General Education Requirements** 12 Credits

English/Communications Requirement: Recommended: ENG 101	3
Mathematics Requirement	3
Science Requirement	3
U.S. and Nevada Constitution Requirements	3

*A list of all courses filling general education requirements for the Associate of Applied Science can be found on the Associate of Applied Science page.*

Note: Documentation and currency of health insurance (card) is required.

### CRIMINAL JUSTICE - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
General Education Courses	6 <input type="checkbox"/>	CRJ 230	3 <input type="checkbox"/>
CRJ 101	3 <input type="checkbox"/>	CRJ 270	3 <input type="checkbox"/>
		General Education Courses	3 <input type="checkbox"/>
Second Semester	Completed	Fourth Semester	Completed
CRJ 102	3 <input type="checkbox"/>	CRJ 103	3 <input type="checkbox"/>
CRJ 164	3 <input type="checkbox"/>	CRJ 266B	27 <input type="checkbox"/>
CRJ 220	3 <input type="checkbox"/>	EMS 100B	0.5 <input type="checkbox"/>
General Education Courses	3 <input type="checkbox"/>	EMS 113B	3 <input type="checkbox"/>

## CRIMINAL JUSTICE

### *Law Enforcement/Academy Certificate of Achievement*

**WNC Academic Division:** Social Science, Education, Humanities & Public Service

**Total Requirements:** 39.5 credits

**Core Requirements** 33.5 Credits

CRJ 103	Communication Within the Criminal Justice Field	3
CRJ 266B*	Western Nevada State Peace Officer Academy	27
EMS 100B	Healthcare Provider CPR	0.5
EMS 113B	First Responder	3

\* Spring and summer class that will fulfill the POST requirement

**General Education Requirements** 6 Credits

English/Communications Requirements: Recommended: ENG 101	3
Mathematics Requirement	3

*A list of all courses filling general education requirements for the Certificate of Achievement can be found on the Certificate of Achievement page.*

### CERTIFICATE OF ACHIEVEMENT - CRIMINAL JUSTICE LAW ENFORCEMENT/ACADEMY - Mission & Outcomes

**Mission:** The purpose of the Certificate of Achievement in Law Enforcement is to ensure that the students have the necessary knowledge and skills to become a peace officer in the state of Nevada, take, and pass the Peace Officers Standards and Training test.

#### Student Learning Outcomes:

- Prepare to become law enforcement officers in the state of Nevada by getting all necessary education and skills required by the state of Nevada
- Be properly prepared to take and pass the Police Officers Standards and Training test for the state of Nevada

### ASSOCIATE OF APPLIED SCIENCE - CRIMINAL JUSTICE LAW ENFORCEMENT/ACADEMY - Mission & Outcomes

**Mission:** The purpose the Associate of Applied Science in Criminal Justice/Law Enforcement Academy (Western Nevada State Peace Officer Academy) is to provide employment-related knowledge and skills necessary to succeed in a chosen field of study.

**Student Learning Outcomes:** Students who complete the Associate of Applied Science in Criminal Justice/Law Enforcement Academy are expected to demonstrate that they

- Have met the general education requirements of WNC
- Maintain proper professional attitude for law enforcement
- Articulate the legal requirements of search and seizure
- Recognize and evaluate criminal law
- Process crime scenes
- Maintain crime scenes
- Analyze theories for committing crimes
- Are prepared to take and pass the Police Officer Standards and Training test to become deputy sheriffs, police officers, juvenile probation officers, attorney general investigators, district attorney investigators, parole and probation officers, and correctional officers



# ACADEMIC DEGREES

## CRIMINAL JUSTICE

### Associate of Arts Transfer Emphasis

The Criminal Justice transfer emphasis is an Associate of Arts degree for students who are planning to transfer to the University of Nevada, Reno, the University of Nevada, Las Vegas, or any other four-year institution.

**Salary:** \$55,178–\$77,688 / year (Nevada)

**Career Outlook:** Depends on specialization; demand is strong for investigators & detectives in a security conscious society

**Good To Know:** Must enforce laws, gather facts & evidence; may also work with the public

**WNC Academic Division:** Social Science, Education, Humanities & Public Service

**Total Requirements:** 60 credits

Core Requirements	21–24 Credits
CRJ 101 Introduction to Criminal Justice I	3
CRJ 102 Introduction to Criminal Justice II	3
CRJ 106 Introduction to Corrections	3
or CRJ 211 Police in America	
CRJ 164 Principles of Investigation	3
CRJ 222 Criminal Law and Procedure	3
or CRJ 220 Criminal Procedures	
& CRJ 230 Criminal Law	3
CRJ 225 Criminal Evidence	3
CRJ 270 Introduction to Criminology	3

### General Education Requirements

General Education Requirements	36–39 Credits
English/Communications Requirements: ENG 101&102 Required	6
Fine Arts Requirement	3
Humanities Requirement	6
Mathematics Requirement	3
Science Requirement	6
Social Sciences Requirement	3
U.S. and Nevada Constitution Requirements	3
General Electives	6–9
Recommended: ANTH 101, CPD 116, CPD 117, PSY 101, PSY 233, PSY 234, PSY 280, SOC 101, SW 230, up to eight credits of Spanish courses	

*A list of all courses filling general education requirements for the Associate of Arts can be found on the Associate of Arts page.*

### CRIMINAL JUSTICE - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
CRJ 101	3 <input type="checkbox"/>	CRJ 225	3 <input type="checkbox"/>
CRJ 106 or CRJ 211	3 <input type="checkbox"/>	CRJ 270	3 <input type="checkbox"/>
ENG 101	3 <input type="checkbox"/>	Degree Electives	3 <input type="checkbox"/>
General Education Courses	6 <input type="checkbox"/>	General Education Courses	6 <input type="checkbox"/>
Second Semester	Completed	Fourth Semester	Completed
CRJ 102	3 <input type="checkbox"/>	CRJ 222	3 <input type="checkbox"/>
CRJ 164	3 <input type="checkbox"/>	Degree Electives	3 <input type="checkbox"/>
Degree Electives	3 <input type="checkbox"/>	General Education Courses	9 <input type="checkbox"/>
ENG 102	3 <input type="checkbox"/>		
General Education Courses	3 <input type="checkbox"/>		

### ASSOCIATE OF ARTS - CRIMINAL JUSTICE - Mission & Outcomes

**Mission:** The purpose of the Associate of Arts degree is to provide the academic knowledge and skills for successful transfer to meet higher educational goals.

**Student Learning Outcomes:** Students who complete their Associate of Arts degree in Criminal Justice are expected to demonstrate that they

- Meet the general education requirements of WNC
- Maintain proper professional attitude for law enforcement
- Articulate the legal requirements of search and seizure
- Recognize and evaluate criminal law
- Process crime scenes
- Analyze theories for committing crimes
- Maintain vocabulary necessary for Criminal Justice
- Have an acute awareness of cultural diversity
- Maintain crime scenes

## CRIMINAL JUSTICE

### 9-1-1 Dispatch Telecommunications Certificate of Achievement

The Public Safety Telecommunicator course, commonly called the 9-1-1 Dispatch program will be offered each spring semester in the evenings. Look for CRJ 260B in the WNC class schedule.

The course is designed to train students in the exciting field of emergency 9-1-1 dispatching. Candidates will learn radio communication skills, map reading skills, CPR and first aid, laws, crime classifications, and crisis intervention techniques. Participants will also be required to ride along with police and fire departments and participate in 32 hours at a dispatch center.

Participants will attend the 12-credit semester-long program on Monday, Tuesday and Wednesday evenings from 6-10 pm. Each day, before classroom instruction, candidates will spend one hour in the computer lab, working on keyboarding skills. Students will need to attend classes on the final two weekends of the semester for their final exams. Exams will consist of dispatching for the WNC police cadets during their high risk vehicle stops and domestic violence scenarios.

After graduation candidates will be prepared to apply for jobs for fire departments, police and sheriff's agencies, even taxi cab companies, ambulance companies...any place that has dispatching needs.

**Salary:** \$39,626–\$58,596 / year (Nevada)

**Career Outlook:** Average growth through 2014

**Good To Know:** Bilingual dispatchers are in great demand

**WNC Academic Division:** Social Science, Education, Humanities & Public Service

**Total Requirements:** 31 – 34 credits

Core Requirements	12 Credits
CRJ 260B 911 Dispatch Emergency Telecommunicator Academy	12

Subject Requirements	9–10 Credits
CRJ 101 Introduction to Criminal Justice I	3
CRJ 102 Introduction to Criminal Justice II	3
SPAN 101B Spanish, Conversational I	3
or SPAN 111 First Year Spanish I	4

### General Education Requirements 10–12 Credits

English/Communications Requirements: Must include writing course	6
Human Relations Requirement	1–3
Mathematics Requirement	3

*A list of all courses filling general education requirements for the Certificate of Achievement can be found on the Certificate of Achievement page.*

### CRIMINAL JUSTICE: 9-1-1 DISPATCH TELECOMMUNICATIONS

#### Mission & Outcomes

**Mission:** The Public Safety Telecommunicator course strives to enhance the student's ability to be successful in his or her career, future learning and personal life. The class component objectives are designed to promulgate lifelong learning habits, improving critical thinking skills, promote cultural diversity and awareness and enhance communication skills. Department of Public Service continues to respond to and anticipate needs in education and training, to better provide a safer, professional and ethical atmosphere within the various Criminal Justice vocations.

**Student Learning Outcomes:** Upon completing the 9-1-1 Dispatch Telecommunications Certificate of Achievement program, students will be able to:

- Meet the general education requirements of WNC
- Demonstrate knowledge of computer technology as it pertains to a dispatch center
- Demonstrate the importance of good verbal and written communications
- Demonstrate multi-tasking techniques within the dispatch setting
- Have an acute awareness of cultural diversity
- Demonstrate professional attitude for dispatchers

# ACADEMIC DEGREES

## CUSTOMER SERVICE

### *Certificate of Achievement*

The Customer Service Certificate of Achievement supports student opportunities in careers which focus on the service industry. It is designed to develop vital skills for success in all facets of business and industry. Emphasis focuses on effective communication, problem solving and customer satisfaction.

**Salary:** \$24,347–\$36,693 / year (Nevada)

**Career Outlook:** Faster than average growth through 2014

**Good To Know:** Positions are located throughout the country in various types of companies. Customer service representatives try to solve customer complaints.

**WNC Academic Division:** Business and Computer Technology

**Total Requirements:** 30 credits

Subject Requirements		15 Credits
BUS 101	Introduction to Business	3
or MGT 103	Small Business Management	
BUS 110B	Human Relations For Employment	3
or MGT 212	Leadership & Human Relations	
BUS 112B	Customer Service	3
BUS 113B	Workplace Attitude Development	1
BUS 114B	Effective Listening and First Impressions	1
BUS 115B	Workplace Time Management & Goal Setting	1
BUS 116B	Effective Telephone Techniques	1
BUS 118B	Resolving Customer Complaints	1
BUS 119B	Work Decision Making & Conflict Resolution	1

**Subject Requirements** 6 Credits

**Choose 6 credits from the following:**

BUS 286B	Developing Your Resume	1
BUS 287B	Interviewing Techniques	1
MGT 201	Principles of Management	3
MGT 235	Organizational Behavior	3
MGT 283	Introduction to Human Resources Management	3
Choose from any ACC prefix		3
Choose from any CIT, COT or IS prefix		0.5–1
Choose from any MKT prefix		1–6

**General Education Requirements** 9 Credits

English/Communications Requirements		
Recommended: BUS 107, BUS 108; Must include a writing course		6
Mathematics Requirement: BUS 109B or higher level mathematics course		3

*A list of all courses filling general education requirements for the Certificate of Achievement can be found on the Certificate of Achievement page.*

## CUSTOMER SERVICE

### *Certificate of Completion Options*

The Customer Service Certificates of Completion allow students to choose four, eight, or all 12 credits and earn certificates which document their efforts in this vital specialty area. Students also have the opportunity to expand on their experience and earn the 30-credit Certificate of Achievement.

Level One: 4-credit certificate

Level Two: 8-credit certificate

Level Three: 12-credit certificate

**Salary:** \$25,200–\$31,660 / year (Nevada)

**Career Outlook:** Expected to grow faster than average through the year 2014

**Good To Know:** Catalog and Internet retailers are expected to grow in the next ten years and expected to hire more customer service representatives.

**WNC Academic Division:** Business And Computer Technology

**Total Requirements:** 4–12 credits

**Certification Requirements** 4–12 Credits

**Choose 4, 8 or 12 credits from the following:**

BUS 110B	Human Relations For Employment	3
or MGT 212	Leadership & Human Relations	
BUS 112B	Customer Service	3
BUS 113B	Workplace Attitude Development	1
BUS 114B	Effective Listening and First Impressions	1
BUS 115B	Workplace Time Management & Goal Setting	1
BUS 116B	Effective Telephone Techniques	1
BUS 118B	Resolving Customer Complaints	1
BUS 119B	Work Decision Making & Conflict Resolution	1



# ACADEMIC DEGREES

## DEAF STUDIES

### Associate of Arts

The Deaf Studies degree will prepare students for transfer to a bachelor's program/degree in Deaf Studies or a related academic field. Courses will help students develop knowledge about American Sign Language, cultural impacts related to being deaf or hard of hearing, and the state of Nevada statutory regulations which govern interpreting

**Salary:** \$29,519–\$65,587 / year (Nevada)

**Career Outlook:** Faster than average growth through 2014

**Good To Know:** Interpreters may be paid by the day, often by the courts or schools. New laws may require more interpreters.

**WNC Academic Division:** Communication and Fine Arts

**Total Requirements:** 60 credits

Program Requirements		24 Credits
AM 145	American Sign Language I	4
AM 146	American Sign Language II	4
AM 147	American Sign Language III	4
AM 148	American Sign Language IV	4
AM 151	Fingerspelling I	1
AM 152	Fingerspelling II	1
AM 153	Deaf Culture	3
AM 154	Deaf History	3

**General Education Requirements**

English/Communications Requirements: ENG 101, ENG 102	6	36 Credits
Fine Arts Requirement (Recommended: THTR 105)	3	
Humanities Requirement	6	
Mathematics Requirement: MATH 120 or higher	3	
Science Requirement	6	
Social Sciences Requirement	9	
U.S. and Nevada Constitution Requirements	3	

*A list of all courses filling general education requirements for the Associate of Arts can be found on the Associate of Arts page.*

### DEAF STUDIES - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
AM 145	4 <input type="checkbox"/>	AM 147	4 <input type="checkbox"/>
General Education Courses	12 <input type="checkbox"/>	AM 151	1 <input type="checkbox"/>
		AM 153	3 <input type="checkbox"/>
		General Education Courses	6 <input type="checkbox"/>
Second Semester	Completed		
AM 146	4 <input type="checkbox"/>		
AM 154	3 <input type="checkbox"/>		
General Education Courses	9 <input type="checkbox"/>		
		Fourth Semester	Completed
		AM 148	4 <input type="checkbox"/>
		AM 152	1 <input type="checkbox"/>
		General Education Courses	9 <input type="checkbox"/>

### AMERICAN SIGN LANGUAGE - Mission & Outcomes

**Mission:** The mission of the Western Nevada College American Sign Language Certificate of Completion Program is to provide quality education to students, thus developing their comprehensive expressive/receptive skills in American Sign Language, fingerspelling fluency and general knowledge of deafness. Students are provided a linguistic foundation in which to enter numerous high-demand professional fields that provide services to deaf or hard of hearing people.

**Student Learning Outcomes:** Upon completing the American Sign Language Certificate of Achievement program, students will be able to:

- Produce basic expressive/receptive sign language communicative skills
- Demonstrate appropriate ASL linguistic and grammatical structure in signing
- Demonstrate functional language aptitude in American Sign Language
- Produce basic expressive/receptive signing of personal heredity and cultural traditions
- Produce basic expressive/receptive signing of biographic and autobiographic events
- Produce basic expressive/receptive signing of number systems - functional & abstract
- Produce basic expressive/receptive signing of major life activities and special occasions
- Demonstrate basic knowledge of deaf culture
- Demonstrate basic fluency in receptive and expressive pragmatics and production of fingerspelling in ASL

## AMERICAN SIGN LANGUAGE

### Certificate of Achievement

**WNC Academic Division:** Communication and Fine Arts

**Total Requirements:** 30 credits

Subject Requirements		18 Credits
AM 145	American Sign Language I	4
AM 146	American Sign Language II	4
AM 147	American Sign Language III	4
AM 148	American Sign Language IV	4
AM 151	Fingerspelling I	1
AM 152	Fingerspelling II	1

**General Education Requirements**

English/Communications Requirements (Must include a writing course)	6	12 Credits
Human Relations Requirement	3	
Mathematics Requirement	3	

*A list of all courses filling general education requirements for the Certificate of Achievement can be found on the Certificate of Achievement page.*

### AMERICAN SIGN LANGUAGE - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
AM 145	4 <input type="checkbox"/>	AM 147	4 <input type="checkbox"/>
General Education Course	3 <input type="checkbox"/>	AM 151	1 <input type="checkbox"/>
		General Education Courses	3 <input type="checkbox"/>
Second Semester	Completed		
AM 146	4 <input type="checkbox"/>		
General Education Courses	3 <input type="checkbox"/>		
		Fourth Semester	Completed
		AM 148	4 <input type="checkbox"/>
		AM 152	1 <input type="checkbox"/>
		General Education Courses	3 <input type="checkbox"/>

### ASSOCIATE OF ARTS - DEAF STUDIES - Mission & Outcomes

**Mission:** The mission of the Western Nevada College Deaf Studies A.A. Degree Program is to provide quality education to students, thus developing their comprehensive expressive/receptive skills in American Sign Language, fingerspelling fluency and knowledge of the history and culture of people who are deaf or hard of hearing. Students are provided a strong foundation in which to enter numerous high-demand professional fields that provide services to deaf or hard of hearing people.

**Student Learning Outcomes:** Upon completing the Deaf Studies Associate of Arts program, students will be able to:

- Produce basic expressive/receptive sign language communicative skills
- Demonstrate appropriate ASL linguistic and grammatical structure in signing
- Demonstrate functional language aptitude in American Sign Language
- Produce basic expressive/receptive signing of personal heredity and cultural traditions
- Produce basic expressive/receptive signing of biographic and autobiographic events
- Produce basic expressive/receptive signing of number systems - functional & abstract
- Produce basic expressive/receptive signing of major life activities and special occasions
- Demonstrate knowledge of linguistic, cultural, educational and social aspects of people who are deaf or hard of hearing
- Demonstrate basic knowledge of historical, political, audiological, educational and linguistic in relation to the history of people who are deaf or hard of hearing.
- Demonstrate basic fluency in receptive and expressive pragmatics and production of fingerspelling in ASL



**DESKTOP PUBLISHING***Certificate of Achievement***WNC Academic Division:** Business and Computer Technology**Total Requirements:** 30 credits**Subject Requirements** 21 Credits

COT 204	Using Windows	3
COT 222	Desktop Publishing With Word Processing	3
COT 223	Advanced Desktop Publishing	3
GRC 118	Computer Graphics - Print Media	3
IS 101	Introduction to Information Systems	3

**Choose six from the following classes:**

ART 107	Design Fundamentals I (2-D)	3
or GRC 107	Design Fundamentals	
ART 243	Digital Imaging I	3
or GRC 183	Electronic Imaging	
ART 244	Digital Imaging II	3
or GRC 283B	Electronic Imaging	
CIT 151	Beginning Web Development	3
or GRC 175	Web Design and Publishing I	
IS 201	Computer Applications	3
MKT 210	Marketing Principles	3

**General Education Requirements**

9 Credits

English/Communications Requirements

Recommended: BUS 108; must include a writing course 3

Human Relations Requirement: Recommended: BUS 110B 3

Mathematics Requirement: Recommended: BUS 109B 3

*A list of all courses filling general education requirements for the Certificate of Achievement can be found on the Certificate of Achievement page.*

**DESKTOP PUBLISHING - Suggested Course Sequence**

First Semester	Completed	Second Semester	Completed
English Course	3 <input type="checkbox"/>	Mathematics Course	3 <input type="checkbox"/>
COT 222	3 <input type="checkbox"/>	General Education Courses	3 <input type="checkbox"/>
GRC 118	3 <input type="checkbox"/>	COT 204	3 <input type="checkbox"/>
IS 101	3 <input type="checkbox"/>	COT 223	3 <input type="checkbox"/>
Program Elective	3 <input type="checkbox"/>	Program Elective	3 <input type="checkbox"/>

**DESKTOP PUBLISHING - Mission & Outcomes**

**Mission:** The purpose of the Certificate in Desktop Publishing in business is to provide the knowledge and skills necessary to succeed in the current business environment.

**Student Learning Outcomes:** Upon completing the Certificate in Desktop Publishing program, students will be able to:

- Provide employment related knowledge and skills
- Know subject matter appropriate to emphasis of certificate
- Understand desktop publishing layout and its importance to the business environment
- Demonstrate oral, written, and computational skills
- Utilize appropriate resources to remain current in the field



# ACADEMIC DEGREES

## DRAFTING TECHNOLOGY - ARCHITECTURAL

### Associate of Applied Science

The Drafting Technology-Architectural emphasis is designed to concentrate course work in architecturally oriented subjects. Students will be taking several courses offered through the Construction Technology Program.

**Salary:** \$37,304–\$53,139 / year (Nevada)

**Career Outlook:** Depends on specialty - greatest demand is for architectural & civil drafters, but slower than average through 2014

**Good To Know:** Specialize in drawing features of buildings & other structures

**WNC Academic Division:** Technology

**Total Requirements:** 60 credits

Core Requirements		12 Credits
CADD 100	Introduction to Computer Aided Drafting	3
CADD 105	Intermediate Computer-Aided Drafting	3
CADD 200	Advanced Computer Aided Drafting	3
DFT 100	Basic Drafting Principles	3

Emphasis Requirements		24 Credits
BI 101B	Introduction to Building Codes	3
CADD 120B	Architectural Drafting I	3
CADD 225B	Architectural Computer Aided Drafting I	3
CONS 108B	Construction Materials and Methods	3
CONS 120B	Blueprint Reading and Specification	3

**Choose 3 credits from the following Capstone Courses:**

CADD 210B	CADD Project	3
CADD 290B	Internship in CADD	3

**Choose 6 credits from the following degree electives:**

CADD 198B	Special Topics in CADD	3
CADD 210B	CADD Project	3
CADD 220B	Architectural Drafting II	3
CADD 290B*	Internship in CADD	3
CADD 295B	Independent Study	3
CONS 114B	Soils, Sitework, Concrete and Testing	3
CONS 118B	Construction Contract Documents	3
CONS 121B	Principles of Construction Estimating	3
CONS 201B	Regulatory Agencies	1
CONS 282B	Construction Law	2

\* May be taken only if not previously used to meet degree requirements.

**General Education Requirements** 24 Credits

English/Communications Requirement: Recommended: BUS 107, BUS 108;

Must include a writing course 6

Human Relations Requirement: Recommended: BUS 110B 3

Humanities/Social Science Requirements 3

Mathematics Requirement: MATH 127 or higher 3

Science Requirement: Physics Recommended 6

U.S. and Nevada Constitution Requirements 3

A list of all courses filling general education requirements for the Associate of Applied Science can be found on the Associate of Applied Science page.

### ASSOCIATE OF APPLIED SCIENCE

#### DRAFTING TECHNOLOGY-ARCHITECTURAL - Mission & Outcomes

**Mission:** The mission of the Associate of Applied Science degree is to provide employment-related knowledge and skills necessary to succeed in a chosen field of study.

**Student Learning Outcomes:** Students who complete an Associate of Applied Science in Drafting Technology will be able to demonstrate:

- knowledge of the subject matter appropriate to the Drafting Technology.

Are able to do the following:

- acquire skills and perform tasks necessary for employment for a career enhancement in the drafting field,
- present themselves effectively to a potential employer,
- effective communication and computation skills appropriate to the drafting field, and
- utilize appropriate resources to remain current in the drafting field.

## DRAFTING TECHNOLOGY - ARCHITECTURAL

### Certificate of Achievement

**WNC Academic Division:** Technology

**Total Requirements:** 31 credits

Subject Requirements		21 Credits
CADD 100	Introduction to Computer Aided Drafting	3
CADD 105	Intermediate Computer-Aided Drafting	3
CADD 120B	Architectural Drafting I	3
CONS 120B	Blueprint Reading and Specification	3
DFT 100	Basic Drafting Principles	3
CADD electives		6

**General Education Requirements** 10 Credits

English/Communications Requirements: Recommended: BUS 108;

Must include a writing course 6

Human Relations Requirement 1

Mathematics Requirement: MATH 110B, MATH 127 or higher level math course, except STAT 152 3

A list of all courses filling general education requirements for the Certificate of Achievement can be found on the Certificate of Achievement page.

Note: MATH 110B does not fulfill the requirement for the Associate of Drafting Technology - Architectural Emphasis.

### DRAFTING TECHNOLOGY - ARCHITECTURAL - Mission & Outcomes

**Mission:** The Mission of Drafting Technology is to: Provide drafting technology courses for traditional college students and transitional employees. The course work will prepare students with the necessary skills for entry level employment in a professional drafting office setting using current Computer Aided Drafting (CAD) software and processes. Additionally provide those currently employed in CAD/Drafting offices with courses to update their skills in using current software and processes.

**Student Learning Outcomes:** Upon completing the Drafting Technology - Architectural Certificate of Achievement program, students will be able to:

- Create and place two dimensional geometry
- Place dimensions on drawings
- Development and use of standard symbols and libraries
- Draw floor plans
- Draw Building Sections and Details
- Draw Building Elevations

### DRAFTING TECHNOLOGY - ARCHITECTURAL - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
BUS 107	3 <input type="checkbox"/>	BUS 110B	3 <input type="checkbox"/>
CADD 100	3 <input type="checkbox"/>	CADD 200	3 <input type="checkbox"/>
CADD 120B	3 <input type="checkbox"/>	CADD 225B	3 <input type="checkbox"/>
CONS 120B	3 <input type="checkbox"/>	Degree Elective	3 <input type="checkbox"/>
DFT 100	3 <input type="checkbox"/>	Science Course	3 <input type="checkbox"/>
Second Semester	Completed	Fourth Semester	Completed
BUS 108	3 <input type="checkbox"/>	BI 101B	3 <input type="checkbox"/>
CADD 105	3 <input type="checkbox"/>	CADD 210B or CADD 290B	
CONS 108B	3 <input type="checkbox"/>	(Capstone Course)	3 <input type="checkbox"/>
MATH 127	3 <input type="checkbox"/>	Degree Elective	3 <input type="checkbox"/>
Science Course	3 <input type="checkbox"/>	Humanities/Social Science Course	3 <input type="checkbox"/>
		U.S./Nevada Constitution	3 <input type="checkbox"/>

# ACADEMIC DEGREES

## DRAFTING TECHNOLOGY - CIVIL

### Associate of Applied Science

The Drafting Technology Civil Drafting emphasis is designed to concentrate course work in civil drafting oriented subjects. Students will be take several courses offered through the Construction Technology program.

**Salary:** \$37,304–\$53,139 / year (Nevada)

**Career Outlook:** Depends on specialty - greatest demand is for architectural & civil drafters, but slower than average through 2014

**Good To Know:** Specialize in drawings & maps of highways, pipelines & water systems

**WNC Academic Division:** Technology

**Total Requirements:** 60 credits

Core Requirements		12 Credits
CADD 100	Introduction to Computer Aided Drafting	3
CADD 105	Intermediate Computer-Aided Drafting	3
CADD 200	Advanced Computer Aided Drafting	3
DFT 100	Basic Drafting Principles	3

Emphasis Requirements		24 Credits
CADD 230B	Civil Drafting I	3
CEE 140	Introduction to Civil Engineering	2
CONS 114B	Soils, Sitework, Concrete and Testing	3
CONS 120B	Blueprint Reading and Specification	3
SUR 119B	Construction Surveying	2

**Choose 3 credits from the following capstone courses:**

CADD 231B	Civil Drafting II	3
CADD 290B	Internship in CADD	3

**Choose 8 credits from the following degree electives:**

CADD 210B	CADD Project	3
CADD 225B	Architectural Computer Aided Drafting I	3
CADD 290B*	Internship in CADD	3
CONS 118B	Construction Contract Documents	3
CONS 121B	Principles of Construction Estimating	3
CONS 201B	Regulatory Agencies	1
CONS 220B	Advanced Sitework Estimating	3
CONS 282B	Construction Law	1

\* May be taken only if not previously used to meet degree requirements.

**General Education Requirements** 24 Credits

English/Communications Requirement: Recommended: BUS 107, BUS 108;

Must include a writing course	6
Human Relations Requirement: Recommended: BUS 110B	3
Humanities/Social Science Requirements	3
Mathematics Requirement: MATH 127 or higher	3
Science Requirement: Physics Recommended	6
U.S. and Nevada Constitution Requirements	3

A list of all courses filling general education requirements for the Associate of Applied Science can be found on the Associate of Applied Science page.

### DRAFTING TECHNOLOGY - CIVIL - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
BUS 107	3 <input type="checkbox"/>	CADD 200	3 <input type="checkbox"/>
CADD 100	3 <input type="checkbox"/>	CONS 114B	3 <input type="checkbox"/>
CEE 140	2 <input type="checkbox"/>	Degree Elective	3 <input type="checkbox"/>
Degree Elective	3 <input type="checkbox"/>	Humanities/Social Science Course	3 <input type="checkbox"/>
DFT 100	3 <input type="checkbox"/>	MATH 127	3 <input type="checkbox"/>
		Science Course	3 <input type="checkbox"/>
Second Semester	Completed	Fourth Semester	Completed
BUS 110B	3 <input type="checkbox"/>	BUS 108	3 <input type="checkbox"/>
CADD 105	3 <input type="checkbox"/>	CADD 231B or CADD 290B (Capstone Course)	3 <input type="checkbox"/>
CADD 230B	3 <input type="checkbox"/>	Degree Elective	2 <input type="checkbox"/>
CONS 120B	3 <input type="checkbox"/>	SUR 119B	2 <input type="checkbox"/>
Science Course	3 <input type="checkbox"/>	U.S./Nevada Constitution	3 <input type="checkbox"/>

### ASSOCIATE OF APPLIED SCIENCE DRAFTING TECHNOLOGY - CIVIL

#### Mission & Outcomes

**Mission:** The mission of the Associate of Applied Science degree is to provide employment-related knowledge and skills necessary to succeed in a chosen field of study.

**Student Learning Outcomes:** Students who complete an Associate of Applied Science in Drafting Technology will be able to demonstrate:

- knowledge of the subject matter appropriate to the Drafting Technology.
- Are able to do the following:
  - acquire skills and perform tasks necessary for employment for a career enhancement in the drafting field
  - present themselves effectively to a potential employer
  - demonstrate effective communication and computation skills appropriate to the drafting field
  - utilize appropriate resources to remain current in the drafting field



# ACADEMIC DEGREES

## DRAFTING TECHNOLOGY - MECHANICAL

### Associate of Applied Science

The Drafting Technology-Mechanical emphasis is designed to concentrate course work in subjects related to manufacturing and machining.

**Salary:** \$40,056–\$60,181 / year (Nevada)

**Career Outlook:** Slower than average growth through 2014

**Good To Know:** Most use computer-aided drafting (CAD) systems, but some still is done manually

**WNC Academic Division:** Technology

**Total Requirements:** 60 credits

Core Requirements		12 Credits
CADD 100	Introduction to Computer Aided Drafting	3
CADD 105	Intermediate Computer-Aided Drafting	3
CADD 200	Advanced Computer Aided Drafting	3
DFT 100	Basic Drafting Principles	3

Emphasis Requirements		24 Credits
CADD 140	Technical Drafting I	3
CADD 141B	Technical Drafting II	3
CADD 245	Solid Modeling and Parametric Design	3
COT 204	Using Windows	3
DFT 110B	Blueprint Reading For Industry	3

**Choose 3 credits from the following Capstone Courses:**

CADD 210B	CADD Project	3
CADD 290B	Internship in CADD	3

**Choose 6 credits from the following degree electives:**

CADD 210B	CADD Project	3
CADD 242	Advanced Technical Drafting	3
CADD 260B	Introduction to CAD/CAM	3
CADD 290B*	Internship in CADD	3
CADD 295B	Independent Study	3
MTT 105B	Machine Shop I	3*

May be taken only if not previously used to meet degree requirements.

General Education Requirements		24 Credits
English/Communications Requirement: Recommended: BUS 107, BUS 108		6
Human Relations Requirement: Recommended: BUS 110B		3
Humanities/Social Science Requirements		3
Mathematics Requirement: MATH 127 or higher		3
Science Requirement: Physics recommended		6
U.S. and Nevada Constitution Requirements		3

A list of all courses filling general education requirements for the Associate of Applied Science can be found on the Associate of Applied Science page.

## ASSOCIATE OF APPLIED SCIENCE DRAFTING TECHNOLOGY - MECHANICAL

### Mission & Outcomes

**Mission:** The mission of the Associate of Applied Science degree is to provide employment-related knowledge and skills necessary to succeed in a chosen field of study.

**Student Learning Outcomes:** Students who complete an Associate of Applied Science in Drafting Technology will be able to demonstrate:

- knowledge of the subject matter appropriate to the drafting technology.
- Are able to do the following:
  - acquire skills and perform tasks necessary for employment for a career enhancement in the drafting field
  - present themselves effectively to a potential employer
  - demonstrate effective communication and computation skills appropriate to the drafting field
  - utilize appropriate resources to remain current in the drafting field

## DRAFTING TECHNOLOGY - MECHANICAL

### Certificate of Achievement

**WNC Academic Division:** Technology

**Total Requirements:** 31 credits

Subject Requirements		21 Credits
CADD 100	Introduction to Computer Aided Drafting	3
CADD 105	Intermediate Computer-Aided Drafting	3
CADD 141B	Technical Drafting II	3
DFT 100	Basic Drafting Principles	3
DFT 110B	Blueprint Reading For Industry	3
CADD Electives		6

**General Education Requirements** 10 Credits

English/Communications Requirements: Recommended: BUS 108;

Must include a writing course

Human Relations Requirement

Mathematics Requirement: MATH 110B, MATH 127 or higher level math course, except STAT152

A list of all courses filling general education requirements for the Certificate of Achievement can be found on the Certificate of Achievement page.

Note: MATH 110B does not fulfill the requirement for the Associate of Applied Science in Drafting Technology - Mechanical Emphasis, which requires MATH 127 or higher.

### DRAFTING TECHNOLOGY - MECHANICAL - Mission & Outcomes

**Mission:** The Mission of Drafting Technology is to provide drafting technology courses for traditional college students and transitional employees. The course work will prepare students with the necessary skills for entry level employment in a professional drafting office setting using current Computer Aided Drafting (CAD) software and processes. Additionally, provide those currently employed in CAD/Drafting offices with courses to update their skills in using current software and processes.

**Student Learning Outcomes:** Upon completing the Drafting Technology - Mechanical Certificate of Achievement program, students will be able to:

- Create and place two dimensional geometry
- Place dimensions on drawings
- Development and use of standard symbols and libraries.
- Create multiview orthographic drawings
- Create section views
- Place annotation on drawings
- Create and insert blocks
- Use Paper Space and External References
- Create and place three dimensional geometry
- Apply concepts and principles of CAD/Drafting to realistic situations

### DRAFTING TECHNOLOGY - MECHANICAL - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
BUS 107	3 <input type="checkbox"/>	BUS 108	3 <input type="checkbox"/>
CADD 100	3 <input type="checkbox"/>	CADD 141B	3 <input type="checkbox"/>
COT 204	3 <input type="checkbox"/>	CADD 200	3 <input type="checkbox"/>
DFT 100	3 <input type="checkbox"/>	Degree Elective	3 <input type="checkbox"/>
DFT 110B	3 <input type="checkbox"/>	Science Course	3 <input type="checkbox"/>
Second Semester	Completed	Fourth Semester	Completed
BUS 110B	3 <input type="checkbox"/>	CADD 210B or CADD 290B	
CADD 105	3 <input type="checkbox"/>	(Capstone Course)	3 <input type="checkbox"/>
CADD 140	3 <input type="checkbox"/>	CADD 245	3 <input type="checkbox"/>
MATH 127	3 <input type="checkbox"/>	Degree Elective	3 <input type="checkbox"/>
U.S./Nevada Constitution	3 <input type="checkbox"/>	Humanities/Social Science	
		Course	3 <input type="checkbox"/>
		Science Course	3 <input type="checkbox"/>



# ACADEMIC DEGREES

## EARLY CHILDHOOD EDUCATION

WNC's Early Childhood Education program is an occupational preparation program which concentrates on the teaching skills needed to work with young children and parents. Students may earn an Early Childhood Education Certificate of Achievement or an Associate of Applied Science degree to help them gain employment in the child care or related field.

Some courses transfer to local colleges and universities, providing a "career ladder" opportunity for students who are seeking additional training for jobs in the care and education of infants, preschoolers and handicapped young children.

The curriculum includes experience with children to develop teaching skills; classes in human development and interpersonal relationships; and instruction on how to select, plan and present learning activities.

Successful completion of the Early Childhood Education certificate or associate degree is designed to qualify students for such employment opportunities as assistants, teachers and directors in child care centers; teachers and assistants in preschools; home day care providers and other child/family related careers.

## EARLY CHILDHOOD EDUCATION

### Associate of Applied Science

The Early Childhood Education Associate of Applied Science degree provides the information, knowledge and skill training for persons caring for young children in a variety of child care facilities.

**Salary:** \$31,182–\$48,735 / year (Nevada)

**Career Outlook:** Faster than average growth through 2014

**Good To Know:** Variable work hours - full-time or part-time

**WNC Academic Division:** Social Science, Education, Humanities & Public Service

**Total Requirements:** 60 credits

Program Requirements		36 Credits
ECE 121	Parent Care Relations	1
ECE 122	Observation Skills	1
ECE 129	Environment For Infant & Toddler	1
ECE 200	The Exceptional Child	3
ECE 204	Principles of Child Guidance	3
ECE 231	Preschool Practicum: Early Childhood Lab	6
ECE 240	Administration of Preschool	3
ECE 250	Introduction to Early Childhood Education	3
ECE 251	Curriculum in Early Childhood Education	3
HDFS 201	Life Span Human Development	3

### Program Electives

**Choose 9 credits from the following:**

COT 105	Computer Literacy	3
or IS 101	Introduction to Information Systems	
or IS 201	Computer Applications	
HDFS 202	Introduction to Families	3
HDFS 232	Diversity and the Young Child - A Multicultural Perspective	3
Other related Early Childhood Education courses (ECE 123 and ECE 168 are recommended)		1–6
Psychology courses (except Statistical Methods)		1–3

### General Education Requirements

English/Communications Requirement: Recommended: BUS 108;		24 Credits
Must include a writing course		6
Humanities/Social Science Requirements		3
Mathematics Requirement: Recommended: BUS 109B		3
Science Requirement: Recommended: NUTR 121		6
U.S. and Nevada Constitution Requirements		3
General Electives		3

*A list of all courses filling general education requirements for the Associate of Applied Science can be found on the Associate of Applied Science page.*

## ASSOCIATE OF APPLIED SCIENCE DEGREE & CERTIFICATE OF ACHIEVEMENT EARLY CHILDHOOD EDUCATION - Mission & Outcomes

### Associate of Applied Science

**MISSION** - The purpose of the Associate of Applied Science degree in Early Childhood Education is to provide academic knowledge and skill for employment in child care or pre-kindergarten programs and related family service fields. The degree will meet educational criteria for employment in publicly funded programs and prepare the student for possible transfer to other colleges and universities to meet higher educational and professional goals.

**STUDENT LEARNING OUTCOMES** - Students who complete the Associate of Applied Science degree in Early Childhood Education are expected to demonstrate that they:

- have met the general education student learning outcomes.
- know the subject matter appropriate to Early Childhood Education.
- demonstrated leadership and supervisory skills.

### Certificate of Achievement

**MISSION** - The Early Childhood Education Certificate of Achievement will provide the academic knowledge and skills for employment in a variety of child care settings.

**STUDENT LEARNING OUTCOMES** - Upon completion of the Early Childhood Education certificate program, the student will be able to:

- recognize and organize a physical environment that supports age appropriate development in young children.
- plan and implement activities that meet the psychosocial, physical and cognitive needs of children in a child care setting.
- develop strategies for maintaining a safe and healthy child care environment.

## EARLY CHILDHOOD EDUCATION

### Certificate of Achievement

**WNC Academic Division:** Social Science, Education, Humanities & Public Service

**Total Requirements:** 30 credits

Subject Requirements		21 Credits
ECE 121	Parent Care Relations	1
ECE 122	Observation Skills	1
ECE 129	Environment For Infant & Toddler	1
ECE 204	Principles of Child Guidance	3
ECE 231	Preschool Practicum: Early Childhood Lab	3
ECE 250	Introduction to Early Childhood Education	3
ECE 251	Curriculum in Early Childhood Education	3
HDFS 201	Life Span Human Development	3
Choose 1-3 credits from related courses in any of the following subject areas: Early Childhood Education, Psychology, Human Development & Family Studies		3

### General Education Requirements

English/Communications Requirements: Recommended: BUS 108;		9 Credits
Must include a writing course		6
Mathematics Requirement: Recommended: BUS 109B		3

*A list of all courses filling general education requirements for the Certificate of Achievement can be found on the Certificate of Achievement page.*

## EARLY CHILDHOOD EDUCATION - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
ECE 121	1 <input type="checkbox"/>	ECE 204	3 <input type="checkbox"/>
ECE 122	1 <input type="checkbox"/>	ECE 231	6 <input type="checkbox"/>
ECE 129	1 <input type="checkbox"/>	General Education Courses	6 <input type="checkbox"/>
ECE 250	3 <input type="checkbox"/>		
Second Semester	Completed	Fourth Semester	Completed
ECE 200	3 <input type="checkbox"/>	ECE 240	3 <input type="checkbox"/>
ECE 251	3 <input type="checkbox"/>	General Education Courses	3 <input type="checkbox"/>
General Education Courses	6 <input type="checkbox"/>	General Elective	3 <input type="checkbox"/>
Program Electives	3 <input type="checkbox"/>	Program Electives	6 <input type="checkbox"/>



# ACADEMIC DEGREES

## ENGINEERING SCIENCE

### Associate of Science

The Engineering Science degree program is designed for students planning to obtain a four-year engineering degree. Engineering is the practical application of scientific theory and principles, and this program develops a strong foundation in mathematics and physical science and provides an introduction to the fundamental aspects of engineering which are developed more thoroughly in the remaining two years of the baccalaureate program. Students who complete the associate degree can transfer to other colleges or universities in many engineering disciplines including civil, chemical, computer, electrical, geological, mechanical, metallurgical, mining, computer science, and engineering physics. All courses in the Engineering Science program are approved for direct transfer to the College of Engineering and the Mackey School of Earth Sciences and Engineering at the University of Nevada, Reno, and up to 64 WNC credits may be directly applied toward a baccalaureate degree.

**Salary:** \$64,529–\$98,630 / year (Nevada)

**Career Outlook:** Faster than average growth through 2014 - Aerospace Technicians growth will be slower than average

**Good To Know:** Work with computers; often work in teams

**WNC Academic Division:** Science, Mathematics & Engineering

**Total Requirements:** 64 credits

Emphasis Requirements		36-38 Credits
CHEM 121	General Chemistry I	4
CS 135	Computer Science I	3
ENGR 100	Introduction to Engineering Design	3
MATH 181	Calculus I	4
MATH 182	Calculus II	4
MATH 283	Calculus III	4
ME 241	Statics	3
or CPE 201	Introduction to Computer Engineering	4
ME 242	Dynamics	3-4
or EE 220	Circuits I	
& EE 220L	Circuits I Laboratory	
PHYS 180	Engineering Physics I	3
PHYS 180L	Engineering Physics I Lab	1
PHYS 181	Engineering Physics II	3
PHYS 181L	Engineering Physics II Lab	1

**Emphasis Requirements: Program Electives** 2-4 Credits

**Choose 2-4 credits from the following:**

CHEM 122	General Chemistry II	4
CS 202	Computer Science II	3
EE 291	Computer Methods For Electrical Engineers	3
EE 296	Internship I	1
MATH 285	Differential Equations	3
ME 198	Cooperative Training Report	1
ME 298	Cooperative Training Report	1
METE 250	Elements of Material Science	3
PHYS 182	Engineering Physics III	3
& PHYS 182L	Engineering Physics III Lab	
or higher level		

**General Education Requirements** 24 Credits

English/Communications Requirements	6
Fine Arts Requirements	3
Humanities Requirements	6
Social Sciences Requirements	6
U.S. and Nevada Constitution Requirements	3

*A list of all courses filling general education requirements for the Associate of Science can be found on the Associate of Science page.*

Note: Most engineering courses are not offered every semester, so technical and non-technical electives should be scheduled to permit the student to enroll in those engineering courses which are most pertinent to his/her preferred discipline of engineering.

### ENGINEERING SCIENCE - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
General Education Courses	6 <input type="checkbox"/>	General Education Courses	6 <input type="checkbox"/>
CS 135	3 <input type="checkbox"/>	MATH 283	4 <input type="checkbox"/>
ENGR 100	3 <input type="checkbox"/>	ME 241 or CPE 201	3-4 <input type="checkbox"/>
MATH 181	4 <input type="checkbox"/>	PHYS 181	3 <input type="checkbox"/>
		PHYS 181L	1 <input type="checkbox"/>
Second Semester	Completed	Fourth Semester	Completed
General Education Course	3 <input type="checkbox"/>	General Education Courses	9 <input type="checkbox"/>
CHEM 121	4 <input type="checkbox"/>	ME 242 or EE 220 & 220L	3-4 <input type="checkbox"/>
MATH 182	4 <input type="checkbox"/>	Program Electives	2-4 <input type="checkbox"/>
PHYS 180	3 <input type="checkbox"/>		
PHYS 180L	1 <input type="checkbox"/>		

## ASSOCIATE OF APPLIED SCIENCE - ENGINEERING SCIENCE

### Mission & Outcomes

**Mission:** The mission of the Associate of Science with an emphasis in Engineering is to prepare students for successful transfer into civil, chemical, computer, electrical, geological, mechanical, metallurgical, or mining engineering, or computer science, or engineering physics.

**Student Learning Outcomes:** Students who complete an Associate of Science with an emphasis in Engineering at WNC are expected to demonstrate that they:

- have met the general education student learning outcomes
- are able to identify, formulate and solve engineering problems
- are able to design and conduct experiments as well as to analyze and interpret data
- can succeed at their transfer institution.



# ACADEMIC DEGREES

## FINE ARTS

### Associate of Arts

The Associate of Arts degree in Fine Arts is designed to provide training in the breadth of skills required for many careers in the fine arts field as well as to satisfy many of the lower division requirements for the Bachelor of Arts and Bachelor of Fine Arts degrees at most four-year institutions.

**Salary:** \$23,982–\$58,550 / year (Nevada)

**Career Outlook:** Average growth through 2014

**Good To Know:** Many fine artists are self-employed; some have graduate degrees

**WNC Academic Division:** Communication and Fine Arts

**Total Requirements:** 60 credits

Program Requirements		21 Credits
ART 100	Visual Foundations	3
or ART 107	Design Fundamentals I (2-D)	
or GRC 107	Design Fundamentals	
ART 101	Drawing I	3
ART 135	Photography I	3
or ART 141	Introduction to Digital Photography I	
or ART 243*	Digital Imaging I	
ART 160	Art Appreciation	3
ART 298*	Portfolio Emphasis	3

**Select one 3-credit course from the following 2-D courses:**

ART 231	Painting I	3
ART 127*	Watercolor I	3
ART 124	Beginning Printmaking	3

**Select one 3-credit course from the following 3-D courses:**

ART 216	Sculpture I	3
ART 115*	Beginning Clay Sculpture	3
ART 211	Ceramics I	3

\* Courses satisfy WNC degree requirements but will not transfer directly to the University of Nevada, Reno as the same course. They may transfer as electives.

**Program Requirements: Program Electives** 6 Credits

**Select 6 credits from the following:**

ART 102	Drawing II	3
ART 105*	Color Theory	3
ART 111*	Beginning Ceramics	3
ART 115*	Beginning Clay Sculpture	3
ART 124	Beginning Printmaking	3
ART 127*	Watercolor I	3
ART 135	Photography I	3
ART 141*	Introduction to Digital Photography I	3
ART 142*	Introduction to Digital Photography II	3
ART 201	Life Drawing I	3
ART 208*	Fiber Arts	3
ART 211	Ceramics I	3
ART 212	Ceramics II	3
ART 216	Sculpture I	3
ART 217	Sculpture II	3
ART 218*	Alternative Sculpture	3
ART 224	Beginning Printmaking: Relief	3
ART 227*	Watercolor II	3
ART 231	Painting I	3
ART 232	Painting II	3
ART 235	Photography II	3
ART 236	Photography III	3
ART 243*	Digital Imaging I	3
ART 244*	Digital Imaging II	3
ART 260	Survey Art History I	3
ART 261	Survey of Art History II	3

\* Courses satisfy WNC degree requirements but will not transfer directly to the University of Nevada, Reno as the same course. They may transfer as electives.

### General Education Requirements

English/Communications Requirements	6	33 Credits
Humanities Requirement	6	
Mathematics Requirement	3	
Science Requirement	6	
Social Sciences Requirement	9	
U.S. and Nevada Constitution Requirements	3	

*A list of all courses filling general education requirements for the Associate of Arts can be found on the Associate of Arts page.*

### FINE ARTS - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
ART 100 or ART 107	3 <input type="checkbox"/>	ART 135, ART 141 or	
ART 101	3 <input type="checkbox"/>	ART 243 (Photography	
General Education Courses	9 <input type="checkbox"/>	Required Course)	3 <input type="checkbox"/>
		ART 216, ART 115 or ART 211	
Second Semester	Completed	(3-D Required Course)	3 <input type="checkbox"/>
ART 160	3 <input type="checkbox"/>	General Education Courses	9 <input type="checkbox"/>
ART 231, ART 127 or ART 124			
(2-D Required Course)	3 <input type="checkbox"/>	Fourth Semester	Completed
General Education Courses	9 <input type="checkbox"/>	ART 298	3 <input type="checkbox"/>
		Art Electives	6 <input type="checkbox"/>
		General Education Courses	6 <input type="checkbox"/>

### FINE ARTS - Mission & Outcomes

**Mission:** The Associate of Arts degree in Fine Arts is designed to provide training in the breadth of skills required for many careers in the fine arts field as well as to satisfy many of the lower division requirements for the Bachelor of Arts and Bachelor of Fine Arts degrees at most four-year institutions.

**Student Learning Outcomes:** Upon completing the Fine Arts Associate of Arts program, students will be able to:

#### General Education

- Have an understanding of the Fine Arts
- Have developed their problem-solving, creative, and critical thinking skills

#### Program Mission Outcomes

- Have developed their creative capacities
- Have participated in at least one cultural activity, such as a visit to a gallery, museum, or attended a community art lecture or event
- Have developed an appreciation for the arts



# ACADEMIC DEGREES

## GEOGRAPHIC INFORMATION SYSTEMS (GIS)

### Associate of Applied Science

WNC's Geographic Information Systems program offers students access to rapidly growing career tracks in agencies and industries using computer software packages to store and present information about resources, water, soils, geography, land uses, development patterns, utilities and other mapping related functions of planning and management.

**Salary:** \$37,641–\$57,239 / year (Nevada)

**Career Outlook:** Slower than average growth through 2014

**Good To Know:** Use analytic & technical skills; heavy computer use

**WNC Academic Division:** Science, Mathematics & Engineering

**Total Requirements:** 60 credits

Program Requirements		36 Credits
GIS 109	Introduction to Geographic Information Systems	3
GIS 110	Principles of Cartography	3
GIS 111	Introduction to Remote Sensing	3
GIS 112	Introduction to ArcInfo	3
GIS 170B	GIS Applications on Conservation Issues	1
GIS 171B	GIS Applications in Urban & Regional Planning	1
GIS 172B	Current Trends in GIS	1
GIS 205	GIS Applications	3
GIS 212	Intermediate ArcInfo	3
GIS 235	Spatial Analysis in GIS	3
GIS 250	GIS Database	3
GIS 270	GIS Extensions	3
GIS 280	Internship in GIS	3
GIS 290	GIS Careers / Portfolio	3

### General Education Requirements

English/Communications Requirement	6	24 Credits
Human Relations Requirement	3	
Humanities/Social Science Requirements: Recommended: GEOG 106	3	
Mathematics Requirement: MATH 126 or higher is required. STAT 152 is recommended	3	
Science Requirement: Recommended: GEOG 103	6	
U.S. and Nevada Constitution Requirements	3	

*A list of all courses filling general education requirements for the Associate of Applied Science can be found on the Associate of Applied Science page.*

## GEOGRAPHIC INFORMATION SYSTEMS (GIS)

### Certificate of Achievement

**WNC Academic Division:** Science, Mathematics & Engineering

**Total Requirements:** 30 credits

Subject Requirements		21 Credits
GEOG 103	Physical Geography	3
GIS 109	Introduction to Geographic Information Systems	3
GIS 110	Principles of Cartography	3
GIS 112	Introduction to ArcInfo	3
GIS 205	GIS Applications	3
GIS 250	GIS Database	3
GIS 270	GIS Extensions	3

### General Education Requirements

English/Communications Requirements: Must include a writing course	3	9 Credits
Human Relations Requirement: PSY recommended	1–3	
Mathematics Requirement: STAT 152, MATH 126 or higher	3	
General Electives	0–2	

*A list of all courses filling general education requirements for the Certificate of Achievement can be found on the Certificate of Achievement page.*

### GEOGRAPHIC INFORMATION SYSTEMS (GIS) - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
General Education Courses	6 <input type="checkbox"/>	General Education Courses	6 <input type="checkbox"/>
GIS 109	3 <input type="checkbox"/>	GIS 171B	1 <input type="checkbox"/>
GIS 110	3 <input type="checkbox"/>	GIS 212	3 <input type="checkbox"/>
GIS 112	3 <input type="checkbox"/>	GIS 235	3 <input type="checkbox"/>
		GIS 280	3 <input type="checkbox"/>
Second Semester	Completed	Fourth Semester	Completed
General Education Courses	9 <input type="checkbox"/>	General Education Courses	3 <input type="checkbox"/>
GIS 111	3 <input type="checkbox"/>	GIS 172B	1 <input type="checkbox"/>
GIS 170B	1 <input type="checkbox"/>	GIS 250	3 <input type="checkbox"/>
GIS 205	3 <input type="checkbox"/>	GIS 270	3 <input type="checkbox"/>
		GIS 290	3 <input type="checkbox"/>

## ASSOCIATE OF APPLIED SCIENCE GEOGRAPHIC INFORMATION SYSTEMS (GIS)

### Mission & Outcomes

**Mission:** The Associate of Applied Science degree in Geographic Information Systems will provide employment-related knowledge and skills necessary to succeed in the Geographic Information Systems field. The degree will meet educational criteria for employment and prepare the student for possible transfer to other colleges and universities to meet higher educational and professional goals.

**Student Learning Outcomes:** Associate of Applied Science in Geographic Information Systems (GIS) graduates are expected to:

- identify spatial problems
- demonstrate technical skills
- implement analysis concepts
- work collaboratively and create industry based presentations



# ACADEMIC DEGREES

## GEOSCIENCES

### Associate of Science

The Geosciences emphasis is designed to provide a strong foundation in earth and physical sciences, and will prepare students for transfer into many disciplines, including geology, geography, environmental science, and science teaching. All courses in the Geosciences emphasis are approved for direct transfer to University of Nevada, Reno and up to 64 WNC credits may be directly applied toward a baccalaureate degree. Seek counseling to choose appropriate courses for a four-year major.

**Salary:** \$63,513–\$106,092 / year (Nevada)

**Career Outlook:** Slower growth than average through 2014

**Good To Know:** Often requires graduate degrees for career advancement

**WNC Academic Division:** Science, Mathematics & Engineering

**Total Requirements:** 60 – 62 credits

**Emphasis Requirements** 17–18 Credits

GEOG 103	Physical Geography	3
GEOG 104	Physical Geography Laboratory	1
GEOG 106	Introduction to Cultural Geography	3
GEOL 101	Physical Geology	3
GEOL 103	Physical Geology Laboratory	1

**Choose one course:**

BIOL 100	General Biology For Non-Science Majors	3
BIOL 190	Introduction to Cell and Molecular Biology	3
BIOL 191	Introduction to Organismal Biology	3

**Choose one course:**

CHEM 100	Molecules and Life in the Modern World	3
CHEM 121	General Chemistry I	4
CHEM 122	General Chemistry II	4

**Emphasis Requirements: Program Electives** 13–14 Credits

**Choose 13-14 credits from the following:**

ATMS 117	Meteorology	3
BIOL 190L	Introduction to Cell and Molecular Biology Lab	1
BIOL 191L	Introduction to Organismal Biology Lab	1
ENV 100	Humans and Environment	3
ENV 130	Fundamentals of Environmental Pollution:	
	Concepts and Methods	3
ENV 210	Land Use Management	3
GEOL 100	Earthquakes, Volcanoes, and Natural Disasters	3
GEOL 102	Earth and Life Through Time	4
GEOL 105	Introduction to Geology of National Parks	3
GEOL 127	Prehistoric Life	3
GEOL 132	Rocks & Minerals	3
GEOL 201	Geology of Nevada	3
GIS 109	Introduction to Geographic Information Systems	3
GIS 205	GIS Applications	3
PHYS 100	Introductory Physics	3
PHYS 151	General Physics I	4
or PHYS 180	Engineering Physics I	
& PHYS 180L	Engineering Physics I Lab	3
PHYS 152	General Physics II	4
or PHYS 181	Engineering Physics II	
& PHYS 181L	Engineering Physics II Lab	3

### General Education Requirements

English/Communications Requirements: ENG 101, ENG 102	6	30 Credits
Fine Arts Requirements	3	
Humanities Requirements	6	
Mathematics Requirements	6	
Social Sciences Requirements	3	
U.S. and Nevada Constitution Requirements	3	
General Electives	3	

*A list of all courses filling general education requirements for the Associate of Science can be found on the Associate of Science page.*

Note: Students planning to transfer to UNR or another university are encouraged to select courses that fulfill core and major requirements, which will vary depending on major. Please consult the current UNR or appropriate university catalog or an advisor for degree requirements.

### GEOSCIENCES - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
General Education Course	6 <input type="checkbox"/>	General Education Courses	12 <input type="checkbox"/>
GEOL 101	3 <input type="checkbox"/>	GEOG 106	3 <input type="checkbox"/>
GEOL 103	1 <input type="checkbox"/>		
Program Electives	6 <input type="checkbox"/>	Fourth Semester	Completed
		General Education Courses	9 <input type="checkbox"/>
Second Semester	Completed	Biology Course	3 <input type="checkbox"/>
General Education Course	3 <input type="checkbox"/>	Program Electives	3-4 <input type="checkbox"/>
Chemistry Course	3-4 <input type="checkbox"/>		
GEOG 103	3 <input type="checkbox"/>		
GEOG 104	1 <input type="checkbox"/>		
Program Electives	3-4 <input type="checkbox"/>		

### ASSOCIATE OF SCIENCE - GEOSCIENCES

#### Mission & Outcomes

**Mission:** The mission of the Associate of Science degree, Geosciences Emphasis is to provide a strong foundation in earth and physical sciences, and prepare students for transfer into many disciplines, including geology, geography, environmental science, and science teaching.

**Student Learning Outcomes:** Students who complete an Associate of Science degree, Geosciences emphasis, at WNC are expected to demonstrate that they:

- have met the general education student learning outcomes
- have gained a basic understanding of:
  - physical processes operating on and within the Earth, including plate tectonics and formation of rocks and minerals
  - common rocks and minerals identification
  - map reading and interpretation
  - processes operating in the atmosphere
  - the spatial distribution of physical and human phenomena
- have gained a basic knowledge of biology and chemistry
- can succeed at their transfer institutions



# ACADEMIC DEGREES

## GRAPHIC COMMUNICATIONS

### Associate of Applied Science

WNC's Graphic Communications program is designed for students who want quick access to career fields involving print design, web design, multimedia, digital video, and animation.

**Salary:** \$35,119–\$59,159 / year (Nevada)

**Career Outlook:** Average growth through 2014. The need is due to expansion of the Internet & need for web page design

**Good To Know:** Creativity is an important skill; more talented designers can earn more money; many graphic artists are self-employed

**WNC Academic Division:** Communication and Fine Arts

**Total Requirements:** 63 credits

Program Requirements		45 Credits
ART 100	Visual Foundations	3
ART 101	Drawing I	3
GRC 109	Color and Design	3
GRC 118	Computer Graphics - Print Media	3
GRC 119	Computer Graphics - Digital Media	3
GRC 144B	Electronic Layout and Typography	3
GRC 156	Computer Illustration I	3
GRC 175	Web Design and Publishing I	3
GRC 181B	Digital Video I	3
GRC 183	Electronic Imaging	3
GRC 188	Web Animation and Interactivity I	3
GRC 244B	Electronic Layout and Typography II	3
or GRC 275B	Web Design and Publishing II	
GRC 283B	Electronic Imaging	3
GRC 294B	Professional Portfolio	3

**Choose 3 credits from the following:**

ART 115	Beginning Clay Sculpture	3
ART 124	Beginning Printmaking	3
ART 127	Watercolor I	3
ART 135	Photography I	3
ART 141	Introduction to Digital Photography I	3
ART 160	Art Appreciation	3
ART 211	Ceramics I	3
ART 216	Sculpture I	3
ART 231	Painting I	3
ART 260	Survey Art History I	3
ART 261	Survey of Art History II	3
GRC 281B	Digital Video II	3

**General Education Requirements**

	18 Credits
English/Communications Requirement	6
Human Relations Requirement: PSY or SOC recommended	3
Mathematics Requirement	3
Science Requirement	3
U.S. and Nevada Constitution Requirements	3

*A list of all courses filling general education requirements for the Associate of Applied Science can be found on the Associate of Applied Science page.*

## GRAPHIC COMMUNICATIONS

### Certificate of Achievement

**WNC Academic Division:** Communication and Fine Arts

**Total Requirements:** 30 credits

Subject Requirements		21 Credits
ART 107	Design Fundamentals I (2-D)	3
or GRC 107	Design Fundamentals	
GRC 118	Computer Graphics - Print Media	3
GRC 119	Computer Graphics - Digital Media	3
GRC 144B	Electronic Layout and Typography	3
GRC 156	Computer Illustration I	3
GRC 175	Web Design and Publishing I	3
GRC 183	Electronic Imaging	3

**General Education Requirements**

	9 Credits
English/Communications Requirements: writing course required	3
Human Relations Requirement: PSY or SOC recommended	3
Mathematics Requirement	3

*A list of all courses filling general education requirements for the Certificate of Achievement can be found on the Certificate of Achievement page.*

### CERTIFICATE OF ACHIEVEMENT - GRAPHIC COMMUNICATIONS

#### Mission & Outcomes

**Mission:** The purpose of the Graphic Communications Certificate of Achievement is to provide basic knowledge and skills necessary to enter the graphic communications field.

**Student Learning Outcomes:** Graphic Communications certificate program graduates should acquire basic skills and perform tasks necessary for employment or career enhancement.

### GRAPHIC COMMUNICATIONS - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
General Ed Courses	3 <input type="checkbox"/>	General Ed Courses	6 <input type="checkbox"/>
ART 100	3 <input type="checkbox"/>	GRC 144B	3 <input type="checkbox"/>
ART 101	3 <input type="checkbox"/>	GRC 188	3 <input type="checkbox"/>
GRC 118	3 <input type="checkbox"/>	GRC 283B	3 <input type="checkbox"/>
GRC 119	3 <input type="checkbox"/>		
Second Semester	Completed	Fourth Semester	Completed
General Ed Courses	3 <input type="checkbox"/>	General Ed Courses	6 <input type="checkbox"/>
GRC 109	3 <input type="checkbox"/>	GRC 181B	3 <input type="checkbox"/>
GRC 156	3 <input type="checkbox"/>	GRC 275B	3 <input type="checkbox"/>
GRC 175	3 <input type="checkbox"/>	GRC 294B	3 <input type="checkbox"/>
GRC 183	3 <input type="checkbox"/>	Program Elective	3 <input type="checkbox"/>

### ASSOCIATE OF APPLIED SCIENCE - GRAPHIC COMMUNICATIONS

#### Mission & Outcomes

**Mission:** The Associate of Applied Science degree in Graphic Communications will provide employment-related knowledge and skills necessary to succeed in the graphic communications field. The degree will meet educational criteria for employment and prepare the student for possible transfer to other colleges and universities to meet higher educational and professional goals.

**Student Learning Outcomes:** Associate of Applied Science in Graphic Communications graduates are expected to research design problems, demonstrate technical skills, implement design concepts, work collaboratively, and perform successful presentations.





# ACADEMIC DEGREES

## MACHINE TOOL TECHNOLOGY

### Associate of Applied Science

The Machine Tool Technology program provides training for students who plan to enter the machine trades field and upgrading for those in the field who desire additional skills. The program is competency based, allowing students to enter at their own level and progress at their own pace. Hands-on learning is stressed, allowing students to take as many laboratory hours as possible.

**Salary:** \$32,894–\$48,872 / year (Nevada)

**Career Outlook:** Slower than average growth, but good jobs available due to difficulty finding skilled workers

**Good To Know:** Often work with computerized numerical control (CNC) machines

**WNC Academic Division:** Technology

**Total Requirements:** 60 credits

Program Requirements		39 Credits
DFT 110B	Blueprint Reading For Industry	3
or CONS 120B	Blueprint Reading and Specification	
MTT 105B	Machine Shop I	3
MTT 110B	Machine Shop II	3
MTT 230B	Computer Numerical Control I	4
MTT 232B	Computer Numerical Control II	4
MTT 250B	Machine Shop III	3
MTT 260B	Machine Shop IV	3
MATH Course *		3

\* MATH 110B Recommended

**Choose 13 credits from the following:**

MTT 106B	Machine Shop Practice I	2
MTT 111B	Machine Shop Practice II	2
MTT 251B	Machine Shop Practice III	2
MTT 261B	Machine Projects	1–6
MTT 262B	Machine Shop Practice IV	2
MTT 292B	Computer-Aided Manufacturing I	4
MTT 293B	Computer-Aided Manufacturing II	4
MTT 295B	Work Experience	1–6
Related Machine Shop Course		1–6

**General Education Requirements**

English/Communications Requirement: Must include a writing course	6
Human Relations Requirement	3
Humanities/Social Science Requirements	3
Science Requirement	6
U.S. and Nevada Constitution Requirements	3

*A list of all courses filling general education requirements for the Associate of Applied Science can be found on the Associate of Applied Science page.*

### MACHINE TOOL TECHNOLOGY - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
DFT 110B	3 <input type="checkbox"/>	Humanities/Social Science Course	3 <input type="checkbox"/>
English Course	3 <input type="checkbox"/>	MTT 230B	4 <input type="checkbox"/>
Human Relations Course	3 <input type="checkbox"/>	MTT 250B	3 <input type="checkbox"/>
Math Course	3 <input type="checkbox"/>	MTT 251B	2 <input type="checkbox"/>
MTT 105B	3 <input type="checkbox"/>	Science Course	3 <input type="checkbox"/>
MTT 106B	2 <input type="checkbox"/>		
Second Semester	Completed	Fourth Semester	Completed
English Course	3 <input type="checkbox"/>	MTT 232B	4 <input type="checkbox"/>
MTT 110B	3 <input type="checkbox"/>	MTT 260B	3 <input type="checkbox"/>
MTT 111B	2 <input type="checkbox"/>	MTT 262B	2 <input type="checkbox"/>
MTT 261B	2 <input type="checkbox"/>	Program Elective	3 <input type="checkbox"/>
Science Course	3 <input type="checkbox"/>	U.S./Nevada Constitution	3 <input type="checkbox"/>

## MACHINE TOOL TECHNOLOGY

### Certificate of Achievement

**WNC Academic Division:** Technology

**Total Requirements:** 30 credits

Subject Requirements		20 Credits
DFT 110B	Blueprint Reading For Industry	3
or CONS 120B	Blueprint Reading and Specification	
MTT 105B	Machine Shop I	3
MTT 106B	Machine Shop Practice I	2
MTT 110B	Machine Shop II	3
MTT 111B	Machine Shop Practice II	2
MTT 230B	Computer Numerical Control I	4
Related machine shop courses		3

**General Education Requirements**

English/Communications Requirements: Recommended: BUS 108;	10 Credits
Must include a writing course	6
Human Relations Requirement	1
Mathematics Requirement: MATH 110B recommended	3

*A list of all courses filling general education requirements for the Certificate of Achievement can be found on the Certificate of Achievement page.*

### CERTIFICATE OF ACHIEVEMENT - MACHINE TOOL TECHNOLOGY

#### Mission & Outcomes

**Mission:** The mission of the Certificate of Achievement degree in Machine Tool Technology is to provide the student with the skills and knowledge to succeed in the machining industry.

**Student Learning Outcomes:** Students who complete an Certificate of Achievement in Machine Tool Technology are expected to:

- know the subject matter appropriate to the Certificate of Achievement in Machine Tool Technology,
- use skills and knowledge needed for acquiring employment,
- have the confidence needed for seeking employment.

### ASSOCIATE OF APPLIED SCIENCE - MACHINE TOOL TECHNOLOGY

#### Mission & Outcomes

**Mission:** The mission of the Associate of Applied Science degree in Machine Tool Technology is to provide the student with the skills and knowledge to succeed in the machining industry.

**Student Learning Outcomes:** Students who complete an Associate of Applied Science in Machine Tool Technology are expected to:

- know the subject matter appropriate to the Associate of Applied Science in Machine Tool Technology,
- use skills and perform tasks essential for employment
- have the self-confidence needed for seeking employment in this field
- use available resources to remain current in the machine industry



# ACADEMIC DEGREES

## MANAGEMENT

### Associate of Applied Science

The Management emphasis is designed to provide a foundation for employment in a variety of business/managerial positions.

**Salary:** \$52,608–\$100,499 / year (Nevada)

**Career Outlook:** Faster than average through 2014; managers will be more likely to keep their jobs

**Good To Know:** Often requires hiring, training & supervising employees, solving problems & administrative duties

**WNC Academic Division:** Business and Computer Technology

**Total Requirements:** 60 credits

**Business Core Requirements** 27 Credits

ACC 201	Financial Accounting	3
& ACC 202	Managerial Accounting	3
BUS 101	Introduction to Business	3
or MGT 103	Small Business Management	
BUS 273	Business Law I	3
ECON 102	Principles of Microeconomics	3
ECON 103	Principles of Macroeconomics	3
IS 101	Introduction to Information Systems	3
IS 201	Computer Applications	3
MGT 201	Principles of Management	3

**Emphasis Requirements** 18 Credits

MGT 212	Leadership & Human Relations	3
MGT 283	Introduction to Human Resources Management	3
MKT 210	Marketing Principles	3

**Choose 9 credits from the following:**

BUS 101	Introduction to Business	3
ECON 261	Principles of Statistics I	3
ECON 262	Principles of Statistics II	3
FIN 101	Personal Finance	3
MGT 103	Small Business Management	3
MGT 235	Organizational Behavior	3
MGT 247B	Industrial Management	3
MKT 111	Introduction to Merchandising	3
MKT 127	Introduction to Retailing	3
MKT 262	Introduction to Advertising	3

**General Education Requirements** 15 Credits

English/Communications Requirement	
Recommended: BUS 107&108; Must include a writing course	6
Mathematics Requirement: BUS 109B or higher level mathematics course	3
Science Requirement	3
U.S. and Nevada Constitution Requirements	3

*A list of all courses filling general education requirements for the Associate of Applied Science can be found on the Associate of Applied Science page.*

Note: See also Retail Management.

### MANAGEMENT - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
ACC 201	3 <input type="checkbox"/>	Degree Electives	9 <input type="checkbox"/>
BUS 101 or MGT 103	3 <input type="checkbox"/>	IS 101	3 <input type="checkbox"/>
BUS 107	3 <input type="checkbox"/>	MGT 283	3 <input type="checkbox"/>
BUS 109B or higher	3 <input type="checkbox"/>		
ECON 102	0 <input type="checkbox"/>		
Second Semester	Completed	Fourth Semester	Completed
ACC 202	3 <input type="checkbox"/>	BUS 273	3 <input type="checkbox"/>
BUS 108	3 <input type="checkbox"/>	Degree Electives	3 <input type="checkbox"/>
ECON 103	3 <input type="checkbox"/>	IS 201	3 <input type="checkbox"/>
MGT 201	3 <input type="checkbox"/>	MGT 210	3 <input type="checkbox"/>
MGT 212	3 <input type="checkbox"/>	Science Course	3 <input type="checkbox"/>
		U.S./Nevada Constitution	3 <input type="checkbox"/>

### MANAGEMENT - Mission & Outcomes

**Mission:** The purpose of the AAS Management degree is to provide the knowledge and skills necessary to be a successful manager.

**Student Learning Outcomes:** Upon completing the AAS Management degree, students will be able to:

- Provide employment related knowledge and skills.
- Know subject matter.
- Understand accounting principles and their importance to the business environment.
- Demonstrate managerial and personal skills.
- Demonstrate oral, written, computational and computer skills.
- Utilize appropriate resources to remain current in their field.
- Appreciate the importance of social, ethical, legal and diversity issues.



# ACADEMIC DEGREES

## MATHEMATICS

### Associate of Science

The Mathematics emphasis has been designed to place students on a career track toward mathematics, either as a university major or as preparation for a teaching career. An associate degree in mathematics offers a student flexibility in future academic endeavors and career opportunities

**Salary:** \$67,360–\$113,800 / year (Nevada)

**Career Outlook:** Need for math teachers & professors is expected to increase faster than average

**Good To Know:** Often requires graduate degrees for career advancement

**WNC Academic Division:** Science, Mathematics & Engineering

**Total Requirements:** 60 credits

**Emphasis Requirements** 30 Credits

MATH 181	Calculus I	4
MATH 182	Calculus II	4
MATH 283	Calculus III	4
MATH 285	Differential Equations	3

Choose 12 credits from at least two subject areas in the courses listed under Science Requirements for the Associate of Science degree. Must include a minimum of four credits of lecture and laboratory from the same subject area. 12

Choose 3 credits from the following: Math courses numbered 120 or higher, except MATH 122 & 123. STAT 152 is also accepted. 3

**General Education Requirements** 30 Credits

English/Communications Requirements: Recommended: ENG 101, ENG 102	6
Fine Arts Requirements	3
Humanities Requirements	6
Social Sciences Requirements	6
U.S. and Nevada Constitution Requirements	3
General Electives	6

A list of all courses filling general education requirements for the Associate of Science can be found on the Associate of Science page.

### MATHEMATICS - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
General Education Courses	9 <input type="checkbox"/>	General Education Courses	6 <input type="checkbox"/>
MATH 181	4 <input type="checkbox"/>	MATH 283	4 <input type="checkbox"/>
		Science Elective	4 <input type="checkbox"/>
Second Semester	Completed	Fourth Semester	Completed
General Education Courses	9 <input type="checkbox"/>	General Elective	6 <input type="checkbox"/>
MATH 182	4 <input type="checkbox"/>	MATH 285	3 <input type="checkbox"/>
Science Elective	4 <input type="checkbox"/>	Math elective	3 <input type="checkbox"/>
		Science Elective	4 <input type="checkbox"/>

### ASSOCIATE OF SCIENCE - MATHEMATICS

#### Mission & Outcomes

**Mission:** The purpose of the Associate of Science degree, emphasis Mathematics, is to provide the academic knowledge and skills for successful transfer to meet higher educational goals.

**Student Learning Outcomes:** Students who complete an Associate of Science degree, Mathematics emphasis, at WNC are expected to demonstrate that they:

- have met the general education student learning outcomes
- understand the content of calculus and differential equations
- are able to apply the content of calculus and differential equations at the appropriate level in mathematics, science, and engineering courses
- can succeed at their transfer institutions



# ACADEMIC DEGREES

## MUSICAL THEATRE

### *Associate of Arts*

The Associate of Arts degree in Musical Theatre is designed to provide training in the breadth of skills required for musical theatre performance, as well as satisfy many of the lower division requirements for the Bachelor of Arts degree in musical theatre at most four-year institutions.

**Salary:** \$42,369–\$123,400 / year (Nevada)

**Career Outlook:** Average growth through 2014

**Good To Know:** Competition for performance jobs will be strong; many actors have other part-time employment or teach acting classes. Theater technicians are in high demand.

**WNC Academic Division:** Communication and Fine Arts

**Total Requirements:** 64 credits

Program Requirements		31 Credits
MUS 121	Music Appreciation	3
or MUS 124	History of The American Musical Theatre	
or THTR 100	Introduction to Theater	
MUSA 145	Voice-Lower Division	4
THTR 105	Introduction to Acting I	3
THTR 199	Play Structure & Analysis I	3
THTR 204	Theatre Technology I	3
THTR 205	Introduction to Acting II	3

**Four semesters participation in college productions for a total of 8 credits**

MUS 176	Musical Theatre Practicum	2-3
MUS 276	Musical Theatre Practicum	1-3
Piano Proficiency		

**Select 4 credits from the following:**

DAN 132	Jazz Dance (beginning)	1
DAN 135	Beginning Ballet	1
DAN 144	Beginning Tap Dancing	1
DAN 232	Jazz Dance (intermediate)	1
DAN 244	Tap Dance (intermediate)	1
THTR 116	Musical Theatre Dance	

**General Education Requirements** 33 Credits

English/Communications Requirements	6
Humanities Requirement	6
Mathematics Requirement	3
Science Requirement	6
Social Sciences Requirement	9
U.S. and Nevada Constitution Requirements	3

*A list of all courses filling general education requirements for the Associate of Arts can be found on the Associate of Arts page.*

## ASSOCIATE OF ARTS - MUSICAL THEATRE

### Mission & Outcomes

**Mission:** The Associate of Arts in Musical Theatre is designed to provide training in the breadth of skills required for musical theatre performance as well as satisfy many of the lower division requirements for the Bachelor of Arts degree in musical theatre at most four-year institutions.

**Student Learning Outcomes:** Students who complete the Associate of Arts Degree in Musical Theatre are expected to have:

- An awareness of the complexities of the human experience, leading to the convincing performance of dimensional characters
- A knowledge of how to use various production elements and dramatic characterization to bring a theatrical concept to life
- A knowledge of plays that are representative of the development of musical theatre

They are expected to be able to:

- Analyze and interpret musical theater productions
- Convincingly live in imaginary circumstances, conveying to the audience a sense of emotional truth
- Engage in focused, concentrated, and active listening, and give and take from fellow performers
- Understand subtext and discover the contrasts within a character
- Function safely and effectively using contemporary theatre technology
- Dance in a variety of genres used in musical theatre
- Read music and to use proper vocal technique to sing musical theater repertoire from multiple eras

They should demonstrate:

- A creative imagination
- A work ethic
- A collaborative attitude
- Artistic standards and judgement
- A respect for the art form

### MUSICAL THEATRE - Suggested Course Sequence

First Semester		Completed	Third Semester		Completed
Dance Elective	1	<input type="checkbox"/>	Dance Elective	1	<input type="checkbox"/>
General Education Courses	6	<input type="checkbox"/>	General Education Courses	6	<input type="checkbox"/>
MUS 176 or MUS 276	2-3	<input type="checkbox"/>	MUS 121 or THTR 100	3	<input type="checkbox"/>
MUSA 145	1	<input type="checkbox"/>	MUS 176 or MUS 276	2-3	<input type="checkbox"/>
Piano Proficiency	0	<input type="checkbox"/>	MUSA 145	1	<input type="checkbox"/>
THTR 105	3	<input type="checkbox"/>	THTR 204	3	<input type="checkbox"/>
Second Semester		Completed	Fourth Semester		Completed
Dance Elective	1	<input type="checkbox"/>	Dance Elective	1	<input type="checkbox"/>
General Education Courses	6	<input type="checkbox"/>	General Education Courses	9	<input type="checkbox"/>
MUS 176 or MUS 276	2-3	<input type="checkbox"/>	MUS 176 or MUS 276	2-3	<input type="checkbox"/>
MUS 203	3	<input type="checkbox"/>	MUSA 145	1	<input type="checkbox"/>
MUSA 145	1	<input type="checkbox"/>	THTR 199	3	<input type="checkbox"/>
THTR 205	3	<input type="checkbox"/>			



**ACADEMIC DEGREES****NURSING PROGRAM***Associate of Applied Science*

WNC's Associate Degree Nursing Program is intended for students seeking a career as a registered nurse. The curriculum is sequenced and progresses in complexity. It integrates knowledge from the bio/psycho/social sciences, humanities, and is intended to prepare graduates to pass the national licensure examination (NCLEX-RN) and to function as registered nurses in diverse care settings. Upon completion of the Associate Degree Nursing Program, students will be awarded an Associate of Applied Science degree. Graduates are eligible to sit for the NCLEX-RN.

The nursing program is approved by the Nevada State Board of Nursing and is accredited by the National League for Nursing Accrediting Commission, 61 Broadway Street, 33rd floor, New York, NY 100176, ph: 800-669-1656. Applicants are advised that eligibility for licensure may be affected by the existence of a criminal record, a history of alcohol or drug abuse, and mental or physical illness that may interfere with the practice of nursing. Applicants are encouraged to directly contact the Nevada State Board of Nursing at 1-775-687-7700 should there be a concern regarding eligibility for licensure. Applicants may also use the NSBN link found on the Nursing & Allied Health web page for information regarding how the board processes applicant information and identifies convictions/situations under which the NSBN will deny application for licensure.

**ASSOCIATE OF APPLIED SCIENCE - NURSING****Mission & Outcomes**

**Mission:** The mission of the nursing program at Western Nevada College is to meet the nursing educational needs of the service area. The program prepares qualified students to function as entry-level registered nurses and transfer to higher degree programs. To accomplish this mission, the curriculum incorporates the National League for Nursing core components of nursing practice that are essential to the work of registered nurses. Graduates are prepared to function in a variety of health care settings, providing culturally sensitive, holistic nursing care to individuals and families across the lifespan. The nursing faculty supports graduate competency in an evolving and complex health care environment by facilitating the students' development of clinical judgment, promoting professional behaviors, and fostering lifelong learning.

**Student Learning Outcomes:** Students who complete an Associate of Applied Science degree with a major in nursing will be expected to demonstrate the ability to:

- Integrate knowledge derived from the bio/psycho/social sciences, humanities, and nursing to achieve deliberative and competent decision-making that is grounded in evidence based practice to achieve best practice outcomes
- Utilize therapeutic communication skills when interacting with patients and their families
- Communicate and document accurate information about patients in a concise and clear manner
- Collaborate with patients, families and health care personnel to achieve positive patient outcomes
- Utilize information literacy skills to integrate research findings that guide (or lead to) best practice decisions
- Utilize the nursing process in a competent and caring manner to safely meet the bio/psycho/social/cultural and spiritual needs of patients across the lifespan in a variety of health care settings
- Provide care that reflects the ethical values of nursing within professional practice standards and the legal parameters of the profession
- Apply concepts of cultural awareness, cultural sensitivity and respect for persons when working with diverse populations
- Provide and manage care through the efficient and effective use of human, physical, financial, and technical resources to meet patient needs
- Demonstrate accountability (professionalism) through identification of self-learning needs and continued professional development
- Utilize principles of teaching and learning to meet the bio/psycho/social/cultural/spiritual needs of patients and their families

**NURSING***Associate of Applied Science***Salary:** \$55,981–\$75,011 / year (Nevada)**Career Outlook:** High growth, especially in home health care & nursing homes**Good To Know:** Hospital nurses tend to earn more than nurses in doctors' offices; may include working days, nights, weekends or holidays**WNC Academic Division:** Nursing and Allied Health**Total Requirements:** 71 credits**Prerequisite Courses\***

21 Credits

BIOL 223*	Human Anatomy and Physiology I	4
BIOL 224*	Human Anatomy and Physiology II	4
BIOL 251	General Microbiology	4
ENG 101	Composition I	3
MATH 120	Fundamentals of College Mathematics	3
or MATH 126	Precalculus I	

or higher MATH course

PSY 101	General Psychology	3
or SOC 101	Principles of Sociology	

Chemistry: Show evidence of completion of high school chemistry from a regionally accredited school within the last three years or completion of CHEM 121 (4 credits) or CHEM 110 (4 credits) within ten years of program application.

\* BIOL 223 & BIOL 224 must be completed at the same college or university at an institution other than within Nevada System of Higher Education. Statute of Limitation for science courses is 10 years by the date of application to the nursing program.

**First Year: Fall Semester Courses**

13 Credits

ENG 102*	Composition II	3
NURS 136	Foundations of Nursing Theory	3
NURS 137	Foundations of Nursing Laboratory	1
NURS 138	Foundations of Nursing Clinical	2
NURS 147	Health Assessment Theory	2
NURS 148	Health Assessment Laboratory	1
NURS 152	Foundations of Pharmacology in Nursing I	1

\* Indicates corequisite. Corequisite courses must be completed by the end of the fourth semester of the nursing program.

**First Year: Spring Semester Courses**

14 Credits

NURS 149	Mental Health and Illness Theory	2
NURS 150	Mental Health and Illness Laboratory	1
NURS 151	Mental Health and Illness Clinical	1
NURS 153	Foundations of Pharmacology in Nursing II	1
NURS 165	Medical Surgical Nursing I Theory	3
NURS 166	Medical Surgical Nursing I Laboratory	1
NURS 167	Medical Surgical Nursing I Clinical	2
PSY 101*	General Psychology	3
or SOC 101*	Principles of Sociology	

\* Indicates corequisite. Corequisite courses must be completed by the end of the fourth semester of the nursing program.

**Second Year: Fall Semester Courses\*\***

12 Credits

NURS 263	Nursing Care Childbearing Family Theory	2
NURS 264	Nursing Care of the Childbearing Family Laboratory	1
NURS 265	Nursing Care of the Childbearing Family Clinical	1
NURS 270	Advanced Clinical Nursing I Theory	3
NURS 271	Advanced Clinical Nursing I Clinical	2
U.S./Nevada Constitutions Course (PSC 103, HIST 111, or CH 203 recommended)*		3

\* See the Associate of Applied Science page for more information on courses fulfilling the general education requirement

**Second Year: Spring Semester\*\***

11 Credits

NURS 266	Pediatric Nursing Theory	2
NURS 267	Pediatric Nursing Laboratory	1
NURS 268	Pediatric Nursing Clinical	1
NURS 276	Advanced Medical Surgical Nursing II Theory	3
NURS 277	Advanced Medical Surgical Nursing II Clinical	2
NURS 284	Role of the ADN Manager of Care	2

Note: \*\* The sequence of some courses for the second year fall & spring semester may be altered.



# ACADEMIC DEGREES

## Nursing Program Application Process

Apply for admission: Apply for admission to Western Nevada College and the WNC nursing program. Applications for the next fall are available on the WNC Nursing & Allied Health web site on or after January 2. The last date for submission of an application to Admissions and Records is April 1.

Applicants who live in rural sites, including Fallon, Fernley, Yerington and Hawthorne are eligible to apply for admission to the Fallon campus. All other applicants who live in areas such as Carson City, Reno, Gardnerville, and Lake Tahoe or elsewhere are eligible to apply for admission to the Carson City campus.

**Prerequisites:** Students must complete all prerequisite courses with a grade of "C" or better to apply for the nursing program. Students may apply for admission into the nursing program while in the process of completing a prerequisite course(s), providing the course is completed by the end of the applicable spring semester or, if taken at another institution, an official transcript showing completion of the course is provided by June 1 of the year of application. Evidence of courses in progress must be submitted by the application deadline.

**Corequisites:** Students who are accepted into the nursing program must complete all corequisite courses with a grade of "C" or better by the end of the fourth semester of the program. Any corequisite course(s) completed with a "C" or better prior to admission into the nursing program will be calculated into the grade point average under admission selection criteria.

**Test of Essential Academic Skills (TEAS):** Students must take the TEAS and receive a minimum score of 60 percent or above for each of the four sub-scores to be considered for admission into the nursing program. Note: The TEAS is not required for LPNs applying for admission into the second year of the program. The TEAS may be taken one time each semester. Consult the Nursing & Allied Health web page for dates and times of testing. Students may take practice TEAS tests which are available on the ATI web site, [www.atitesting.com](http://www.atitesting.com).

**Residency:** An applicant who is classified as a Nevada resident or Good Neighbor for tuition purposes at WNC at the time of application to the nursing program will be awarded one point in the nursing admissions/selection criteria.

**Application and Supporting Documents:** Submit the completed application with supporting documents, which include TEAS results and all required college and university transcripts, as appropriate to Admissions and Records in the time frame delineated on the nursing program application.

### NURSING ADMISSION/SELECTION CRITERIA

Science GPA (BIOL & CHEM prerequisite courses)	2.0-2.49 (2)	2.5-2.99 (4)	3.0-3.49 (6)	3.5-4.0 (8)
GPA (pre- and corequisite courses) (A grade of C or better is required for all pre and corequisite courses in the nursing program.)	2.0-2.49 (1)	2.5-2.99 (2)	3.0-3.49 (3)	3.5-4.0 (4)
Test of Essential Academic Skills (TEAS)	60-69 (1)	70-79 (2)	80-89 (3)	90-99 (4)
(A minimum cut score of 60% is required for each subtest. Not required for LPNs or students seeking transfer with grades of C or better in nursing.)				
Completion of corequisite credits	3-6 (1)	7-9 (2)		

Nevada Resident: An applicant who is classified as a Nevada resident or Good Neighbor for tuition purposes at Western Nevada College at the time of application to the nursing program will be awarded one (1) point in the nursing admissions selection criteria.

Maximum Possible Points: 19

## Other Important Information

- Nursing learning activities are scheduled on & off campus, days, evenings & weekends.
- Courses are Web-CT Enhanced, necessitating that students have basic computer skills.
- Clinical experiences take place at long-term health care facilities, acute care hospitals, clinics and day care centers
- A grade of C (75 percent) or better is required in all nursing courses to continue in the nursing program.
- Students not admitted to the nursing program must reapply to be considered for admission the following year.
- Nursing students are expected to meet the Nursing Student Essential Functions as discussed on the nursing web site.
- Documentation and currency of the following is required after acceptance into the nursing program and prior to the start of classes:
  1. An acceptable physical examination, and required immunizations and tests.
  2. CPR certification (card required) through the American Heart Association (Health Care Provider).
  3. Major medical health insurance (card required).
  4. An acceptable background check.

A background check is required by health care organizations. Students accepted into WNC's nursing program, emergency medical services courses and surgical technology program will be required to pass a background check in order to attend clinicals and remain in the program. Drug screening may be required by health care organizations. See the Nursing & Allied Health web page for the process and procedures to follow.

## Licensed Practical Nurse to ADN

Practical nurses seeking admission into the nursing program are required to successfully challenge the first year of the nursing program at Western Nevada College. The challenge process is unique to the nursing program and varies from the college's general challenge policy. The process consists of three steps outlined below:

### Step 1

Complete all prerequisite courses with a grade of C or better.\*  
Complete NURS 147 and NURS 148 or equivalent course/s with a grade of C or better.\*\*  
Hold, or be eligible to hold, a practical nursing license in the state of Nevada. Candidates with a restricted LPN license will be evaluated on an individual basis.  
\* College science courses have a ten-year statute of limitations.  
\*\*NURS 147/148 or equivalent must be repeated if the completed course is older than two years at the time of application.

### Step 2

Pass the following written competency examinations with a score of 75 percent or better:

- Foundations of Nursing
- Medical/Surgical Nursing
- Psychiatric Nursing

Scores of students who pass the competency examinations will remain on file for one year from the date of the passage.

### Step 3

Demonstrate ability to safely perform first and second semester nursing skills in the nursing laboratory. A list of the skills to be demonstrated for each semester is available in the Office of Nursing & Allied Health. Skills will be evaluated on a pass/fail (P/F) basis.

Contact the Nursing & Allied Health Office for information regarding the costs for competency examinations.

Candidates who successfully complete the above three steps are eligible to apply for admission into the nursing program by submitting an application and other required documents to Admission and Records by the required date. Information regarding the admission process may be obtained by accessing the Nursing and Allied Health web site or by contacting the Office of Nursing and Allied Health located in room 110 of the Cedar Building. The telephone number is 775-445-3294.

Candidates will be admitted into the nursing program based on a space available basis. In the event that more applications are received than space available, decisions regarding admission will be based upon the selection criteria used for first semester applicants (excluding TEAS scores).

## Students Requesting Transfer & Re-Admission Readmission Policy for the Nursing Program

1. A student who matriculated into the Western Nevada College nursing program may be readmitted one time following a withdrawal/failure. A written request for an exemption to the policy for such reasons as medical and military will be considered by the Nursing Program Readmission Committee.

2. Students are eligible to be considered for readmission or transfer into the nursing program using a point system and on a space available basis.

3. Students seeking readmission or transfer into the nursing program will be required to demonstrate currency of knowledge and skills by passing competency evaluations for selected nursing theory and nursing laboratory courses previously successfully completed. Students may choose the option to repeat those courses, or will be required to repeat those courses if the competency examinations are not successfully passed.

A score of 75% or more is required for each theory competency evaluation and a passing grade is required for selected skill competencies, including basic nursing assessment skills. Students should contact the nursing program administrative assistant to schedule competency evaluations.

Students who withdraw from or who failed a course or courses that are related (e.g. NURS 136, 137 and 138) will be required to repeat all courses in the sequence.

4. Nursing courses taken more than three years prior to reapplication or prior to transfer application will not be accepted and will need to be repeated.

5. Students seeking readmission or transfer into the nursing program will be required to submit an acceptable background check.

6. The Nursing Program Readmission Committee will review applications of students who are seeking readmission into the program. The committee acknowledges the responsibility to readmit students, who in the judgment of the committee, satisfy the requirements of scholarship and professional suitability for nursing. The committee reserves the right to deny readmission based on a history of unprofessional conduct which violates the ANA Code of Ethics.

### CERTIFIED NURSING ASSISTANT

A certified nursing assistant class is offered through the Division of Nursing and Allied Health. The college offers NURS 130 - Nursing Assistant, a six-credit class that prepares students to take the Nevada licensing exam for certification as a nursing assistant.

### EMERGENCY MEDICAL SERVICES

Emergency Medical Services courses are offered through the Division of Nursing and Allied Health. They include: EMS 100B - CPR, First Responder, EMS 108B - EMT Basic and EMT Refresher, EMS 112B - EMT enhanced (Intermediate), and EMT Instructor. EMS courses are offered in a sequential series to prepare individuals with the knowledge and skills to assess and care for patients in an emergency or in an out-of-hospital setting. Completion of selected courses is designed to prepare students to take the National Registry Examination for EMT-Basic and the appropriate Nevada EMS certification examination for EMT Enhanced (Intermediate).

Information . . . . . 775-445-3296

**Immunization Requirements:** /academics/division/nalh/immunizations.php

**WNC Academic Division:** Nursing and Allied Health

### LABORATORY TECHNICIAN-PHLEBOTOMY

A phlebotomy class is offered through the Division of Nursing and Allied Health. LTE 110 - Techniques of Venipuncture, is listed in the class schedule under the Laboratory Technician heading. The course provides students the knowledge and skills necessary to perform the collection, identification, and preservation of specimens as applied to venipuncture techniques.

## PHYSICS

### Associate of Science

The Physics emphasis is designed for students wishing to pursue studies in the field of physics, either as a university major or as preparation for a teaching career.

**Salary:** \$62,066–\$104,054 / year (Nevada)

**Career Outlook:** Slower than average growth through 2014

**Good To Know:** Graduate degrees required for career advancement and higher salaries

**WNC Academic Division:** Science, Mathematics & Engineering

**Total Requirements:** 60 – 62 credits

#### Emphasis Requirements

		36–38 Credits
CHEM 121	General Chemistry I	4
CHEM 122	General Chemistry II	4
MATH 181	Calculus I	4
MATH 182	Calculus II	4
MATH 283	Calculus III	4
MATH 285	Differential Equations	3
PHYS 180	Engineering Physics I	3
PHYS 180L	Engineering Physics I Lab	1
PHYS 181	Engineering Physics II	3
PHYS 181L	Engineering Physics II Lab	1
PHYS 182	Engineering Physics III	3
PHYS 182L	Engineering Physics III Lab	1
PHYS 293	Directed Study	1–3

#### General Education Requirements

	24 Credits
English/Communications Requirements: Recommended: ENG 101, ENG 102	6
Fine Arts Requirements	3
Humanities Requirements: Recommended: CH 201, CH 202	6
Social Sciences Requirements	6
U.S. and Nevada Constitution Requirements	3

*A list of all courses filling general education requirements for the Associate of Science can be found on the Associate of Science page.*

Note: EPY 150 is strongly recommended but not required for graduation. CHEM 201 and 202 are acceptable in lieu of CHEM 121 and 122.

#### PHYSICS - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
General Ed Courses	9 <input type="checkbox"/>	General Ed Courses	6 <input type="checkbox"/>
CHEM 121	4 <input type="checkbox"/>	MATH 283	4 <input type="checkbox"/>
MATH 181	4 <input type="checkbox"/>	PHYS 181	3 <input type="checkbox"/>
		PHYS 181L	1 <input type="checkbox"/>
Second Semester	Completed	Fourth Semester	Completed
CHEM 122	4 <input type="checkbox"/>	General Ed Courses	6 <input type="checkbox"/>
General Ed Courses	3 <input type="checkbox"/>	MATH 285	3 <input type="checkbox"/>
MATH 182	4 <input type="checkbox"/>	PHYS 182	3 <input type="checkbox"/>
PHYS 180	3 <input type="checkbox"/>	PHYS 182L	1 <input type="checkbox"/>
PHYS 181L	1 <input type="checkbox"/>	PHYS 293	1–3 <input type="checkbox"/>

### ASSOCIATE OF SCIENCE - PHYSICS

#### Mission & Outcomes

**Mission:** The purpose of the Associate of Science with an emphasis in Physics is to provide the academic knowledge and skills for successful transfer to meet higher educational goals.

**Student Learning Outcomes:** Students who complete an Associate of Science degree at WNC are expected to demonstrate that they:

1. have met the general education student learning outcomes.
2. know conceptual and analytical fundamentals of classical and modern physics as well as electricity and magnetism.
3. can succeed in their transfer institutions.

# ACADEMIC DEGREES

## REAL ESTATE

### *Associate of Applied Science in Business*

The Real Estate emphasis has been designed to prepare students for careers in the real estate sales industry. Career opportunities also exist in commercial banking, escrow services, land planning and zoning, and land development. Approved continuing education credits completed through the Nevada Real Estate Division may be applied toward this degree as real estate electives.

**Salary:** \$29,674–\$84,239 / year (Nevada agents)

**Career Outlook:** Average growth through 2014

**Good To Know:** About 59 percent of real estate agents are self-employed

**WNC Academic Division:** Business and Computer Technology

**Total Requirements:** 60 credits

Subject Requirements		24 Credits
ACC 135B	Bookkeeping I	3
& ACC 201	Financial Accounting	3
or ACC 201	Financial Accounting	
& ACC 202	Managerial Accounting	
BUS 101	Introduction to Business	3
or MGT 103	Small Business Management	
BUS 110B	Human Relations For Employment	3
or MGT 201	Principles of Management	
or MGT 212	Leadership & Human Relations	
or MGT 283	Introduction to Human Resources Management	
BUS 273	Business Law I	3
ECON 102	Principles of Microeconomics	3
IS 101	Introduction to Information Systems	3
IS 201	Computer Applications	3

Emphasis Requirements		18 Credits
RE 101	Real Estate Principles I	3
RE 103	Real Estate Principles II	3
RE 104	Real Estate Law & Conveyancing	3
RE 199	Real Estate Investments	3
RE 206	Real Estate Appraising	3
Elective: Any Real Estate Course		3

General Education Requirements		18 Credits
English/Communications Requirement: Recommended: BUS 107&108;		
Must include a writing course		6
Mathematics Requirement: RE 102B, BUS 109B or higher level		
mathematics course		3
Science Requirement		3
U.S. and Nevada Constitution Requirements		3
General Electives		3

*A list of all courses filling general education requirements for the Associate of Applied Science can be found on the Associate of Applied Science page.*

Note: Real Property Managers need 24 hours of approved continuing education in addition to licensing and state exam.

### REAL ESTATE - Mission & Outcomes

**Mission:** The purpose of the AAS Real Estate degree is to provide the knowledge and skills necessary to succeed in the Real Estate field.

**Student Learning Outcomes:** Upon completing the AAS Real Estate program, students will be able to:

- Provide employment related knowledge and skills.
- Know subject matter.
- Understand accounting principles and their importance to the business environment.
- Demonstrate managerial and personal skills.
- Demonstrate oral, written, computational and computer skills.
- Utilize appropriate resources to remain current in their field.
- Appreciate the importance of social, ethical, legal and diversity issues.

### REAL ESTATE - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
ACC 135B or ACC 201	3 <input type="checkbox"/>	General Elective	3 <input type="checkbox"/>
BUS 101 or MGT 103	3 <input type="checkbox"/>	BUS 107	3 <input type="checkbox"/>
ECON 102 or ECON 103	3 <input type="checkbox"/>	RE 102B or BUS 109B	3 <input type="checkbox"/>
IS 101	3 <input type="checkbox"/>	RE 104	3 <input type="checkbox"/>
RE 101	3 <input type="checkbox"/>	RE 206	3 <input type="checkbox"/>
Second Semester	Completed	Fourth Semester	Completed
ACC 201 or ACC 202	3 <input type="checkbox"/>	BUS 108	3 <input type="checkbox"/>
BUS 273	3 <input type="checkbox"/>	RE 199 or RE 202	3 <input type="checkbox"/>
IS 201	3 <input type="checkbox"/>	RE 201B	3 <input type="checkbox"/>
MGT 201, MGT 212,		Science Course	3 <input type="checkbox"/>
MGT 283 or BUS 110B	3 <input type="checkbox"/>	U.S./Nevada Constitution	3 <input type="checkbox"/>
RE 103	3 <input type="checkbox"/>		

## REAL ESTATE LICENSING PROGRAM

These licensing programs fulfill the minimum course requirements needed to be eligible to take the Nevada Real Estate Sales and/or Broker examination and the Residential Appraisers License examination. For additional information, please contact the State of Nevada Real Estate Commission.

**WNC Academic Division:** Business and Computer Technology

### REAL ESTATE

#### *Sales License State of Nevada*

**Total Requirements:** 6 credits

Requirements		6 Credits
RE 101	Real Estate Principles I	3
RE 103	Real Estate Principles II	3

### REAL ESTATE

#### *Broker License State of Nevada*

**Total Requirements:** 64 credits

Requirements		64 Credits
RE 101	Real Estate Principles I	3
RE 103	Real Estate Principles II	3
RE 201B	Real Estate Brokerage	3
RE 206	Real Estate Appraising	3
General Electives		37
Real Estate, Business or Economics Electives		15

## REAL ESTATE - RESIDENTIAL

### *Appraiser Apprentice License State of Nevada*

**Total Requirements:** 7 credits

Requirements		7 Credits
RE 101	Real Estate Principles I	3
or RE 103	Real Estate Principles II	
RE 198B	Special Topics	1
RE 206	Real Estate Appraising	3

# ACADEMIC DEGREES

## RETAIL MANAGEMENT

### *Certificate of Achievement*

Western Nevada College offers a 30-credit Certificate of Achievement in Retail Management to prepare students for a career in the retail business.

A retail management career incorporates buying, merchandising, promotion, management, operations, finance and computer applications.

Required classes for the Retail Management Certificate of Achievement are in business and business communications, accounting, information systems, management and marketing, and many serve as a ladder to business degrees. The WNC program provides students an opportunity to earn a relevant certificate, and the classes are also required for associate degrees. Most are also transferable to four-year colleges. The certificate may particularly benefit employees interested in moving up to supervisory and management positions.

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**Salary:** \$36,202–\$100,870 / year (Nevada)

**Career Outlook:** Slower than average growth through 2014

**Good To Know:** Career incorporates buying, merchandising, promotion, management, operations, finance & computer applications

**WNC Academic Division:** Business and Computer Technology

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**Total Requirements:** 30 credits

<b>Core Requirements</b>		21 Credits
ACC 135B	Bookkeeping I	3
or ACC 201	Financial Accounting	
BUS 110B	Human Relations For Employment	3
or BUS 112B	Customer Service	
IS 101	Introduction to Information Systems	3
or IS 201	Computer Applications	
MGT 201	Principles of Management	3
or MGT 235	Organizational Behavior	
or MGT 283	Introduction to Human Resources Management	
MGT 212	Leadership & Human Relations	3
MKT 127	Introduction to Retailing	3
MKT 210	Marketing Principles	3

**General Education Requirements** 9 Credits

English/Communications Requirements: Recommended: BUS 107, BUS 108;

Must include a writing course 6

Mathematics Requirement: Recommended: BUS 109B 3

*A list of all courses filling general education requirements for the Certificate of Achievement can be found on the Certificate of Achievement page.*



# ACADEMIC DEGREES

## SURGICAL TECHNOLOGY

### *Certificate of Achievement*

The Surgical Technology Certificate of Achievement program is intended for the student seeking a career as a surgical technologist. It is designed to be completed over two consecutive academic semesters after admission into the program. The program is accredited by the Commission on Accreditation of Allied Health Education Programs. Upon completion of the program, students will be eligible to take the National Certification Examination for Surgical Technology.

Classroom and laboratory experiences include instruction and practice in operating room techniques, infection prevention and control, and basic care of surgical patients in the operating room. Clinical learning includes supervised, hands-on surgical experiences in scrubbing for a variety of surgical procedures.

### Selective Admission Requirements

- Apply for admission to WNC and the Surgical Technology program.
- Complete all prerequisite courses prior to admission into the program. Note: science courses must have been completed within the last 10 years.
- Submit completed application with supporting documents and required transcripts, as appropriate, to Admissions and Records in the time frame delineated on the Surgical Technology program application.

A limited number of qualified students are admitted into the program utilizing specified selection criteria.

A point system is utilized to make decisions regarding admission of applicants. All applicants will be evaluated in two areas following the criteria outlined on this page. Admission will be offered to the applicants on the list with the highest points. Applicants not selected must reapply for consideration.

Questions regarding the admission process should be directed to  
Admissions and Records ..... 775-445-3277

### Immunization Requirements

Link Only: /academics/division/nalh/immunizations.php

### Surgical Technology Program Application (2009)

<http://www.wnc.edu/files/academicdivisions/surgtechapplication2009.pdf>

### Additional Information

- Learning activities are scheduled on and off campus during days, evenings and weekends including but not limited to Carson City, Reno, Lake Tahoe and Fallon. Students are required to provide their own transportation.
- Clinical experiences take place in acute care hospital and same day surgery centers.
- Documentation and currency of the following is required after acceptance into the Surgical Technology program and prior to the start of classes:
  1. Submission of an acceptable physical examination and required immunizations and tests;
  2. Health Care Provider/BLS CPR certification from the American Heart Association (card required);
  3. Major medical health insurance (card required);
  4. A minimum grade of C is required in all prerequisite and corequisite courses.
  5. A minimum grade of C is required in all SRGT courses.
  6. A background check is required by health care organizations. Students accepted into WNC's nursing program, emergency medical services courses and surgical technology program will be required to pass a background check in order to attend clinicals and remain in the program. Drug screening may be required by health care organizations in the fall of 2008. See the Nursing & Allied Health web site for the process and procedures to follow.

Students who are accepted into the Surgical Technology program will be required to enroll in all surgical technology courses required for each semester; students may not enroll for a portion of a semester of surgical technology courses regardless of previous completion of surgical technology courses. Students must successfully pass all surgical technology courses (grade of C or better) within each semester to continue in the program and/or graduate.

Employment opportunities for the graduate of the Surgical Technology program are excellent. Positions are available in hospitals and ambulatory surgical centers in the Reno, Carson City, Fallon and Lake Tahoe areas.

### Admission/Selection Criteria

Maximum Points Possible (in parentheses)

Anatomy & Physiology	2.0-2.49	2.5-3.0	3.1-3.49	3.5-4.0
Points Awarded	(2)	(4)	(6)	(8)

GPA for English, Math & Human Relations courses

	2.0-2.49	2.5-3.0	3.1-3.49	3.5-4.0
Points Awarded	(1)	(2)	(3)	(4)

\* Students must complete all prerequisite and corequisite courses with a minimum grade of "C."

### CERTIFICATE OF ACHIEVEMENT - SURGICAL TECHNOLOGY Mission & Outcomes

**Mission:** The mission of the Surgical Technology Program at WNC is to meet the Surgical Technologist educational needs of the service area. The program prepares qualified students to function as entry Level 1 Surgical Technologists in a variety of operating room setting by providing learning activities to promote growth in knowledge, attitude, and psychomotor skills. To accomplish this mission, the curriculum incorporates the content of the Core Curriculum for Surgical Technology as defined by the Association of Surgical Technologists.

**Student Learning Outcomes:** Upon completion of the program the graduate will demonstrate the ability to:

1. Integrate and value knowledge derived from the bio/psycho/social sciences, humanities and surgical technology while providing surgical care to patients in a variety of health care settings under the direction of a registered nurse
2. Practice within the legal and ethical standards for Level I surgical technologist
3. Use communication techniques appropriate to the setting
4. Achieve the Level I competencies identified by the Association of Surgical Technologists by demonstrating
  1. knowledge and practice of basic patient care concepts
  2. application of the principles of asepsis in a knowledgeable manner that provides for optimal patient care in the operating room
  3. basic surgical case preparation skills
  4. the ability to perform the role of first scrub on all basic surgical cases
  5. responsible behavior as a health care professional





**ACADEMIC DEGREES****SURGICAL TECHNOLOGY***Certificate of Achievement***Salary:** \$38,187–\$51,267 / year (Nevada)**Career Outlook:** Faster than average growth through 2014**Good To Know:** Technologists advance by specializing in a particular area of surgery**WNC Academic Division:** Nursing and Allied Health**Total Requirements:** 39 – 43 credits

<b>Prerequisite Courses</b>		10 Credits
BIOL 223	Human Anatomy and Physiology I	4
or BIOL 200	Elements of Human Anatomy & Physiology	
& BIOL 204	Elements of Human Anatomy & Physiology Lab	
ENG 101	Composition I	3
MATH 120	Fundamentals of College Mathematics	3
or MATH 126	Precalculus I	

**Corequisite Course Requirements** 3–7 Credits

BIOL 224 Human Anatomy and Physiology II  
 (Only if BIOL 224 taken as a prerequisite)

**Human Relations Requirement****Choose one course from the following:**

ANTH 101	Introduction to Cultural Anthropology	3
BUS 110B	Human Relations For Employment	3
PSY 101	General Psychology	3
PSY 102	Psychology of Personal/Social Adjustment	3
PSY 280	Understanding Men and Women	3
SOC 101	Principles of Sociology	3
SOC 102	Contemporary Social Issues	3

**Subject Requirements** 26 Credits

SRGT 100B	Foundations of Surgical Technology	2.5
SRGT 102B	Sterilization and Disinfection	2.5
SRGT 104B	Operating Room Techniques	4
SRGT 110B	Preparation of the Surgical Patient	2.5
SRGT 111B	Surgical Procedures	5.5
SRGT 132B	Surgery Clinical Practice	9

Note: BIOL 223 and 224 must be completed at the same institution if taken outside of Nevada System of Higher Education institutions.



# ACADEMIC DEGREES

## WELDING TECHNOLOGY

*Associate of Applied Science*

The Welding Technology program is a preparation program which offers students competencies to prepare for code exams. This allows students with varying degrees of competencies to enter the program and progress at their own pace. Students are encouraged to obtain as many lab hours as possible to ensure their skill development.

**Salary:** \$29,816–\$48,109 / year (Nevada)

**Career Outlook:** Average or slightly slower growth through 2014

**Good To Know:** Certification required for many jobs

**WNC Academic Division:** Technology

**Total Requirements:** 63 credits

Program Requirements		39 Credits
DFT 100	Basic Drafting Principles	3
WELD 211	Welding I	3
WELD 212B	Welding I Practice	2
WELD 221	Welding II	3
WELD 222B	Welding II Practice	2
WELD 231B	Welding III	3
WELD 232B	Welding III Practice	2
WELD 241B	Welding IV	3
WELD 242B	Welding IV Practice	2
WELD 250B	Welding Certification Preparation	1–12

### Program Electives

**Choose 4-11 credits from the following:**

ET 131B	Electronics I	4
MTT 105B	Machine Shop I	3
or WELD 151B	Metallurgy I	
WELD 224B	Welding Projects	1–6
WELD 290B	Internship in Welding	1–4
WELD: Related Welding Courses		1–3

### General Education Requirements

English/Communications Requirement	24 Credits
Recommended: BUS 107&108; must include a writing course	6
Human Relations Requirement	
Recommended: BUS 110B	3
Humanities/Social Science Requirements	3
Mathematics Requirement	3
Science Requirement	6
U.S. and Nevada Constitution Requirements	3

*A list of all courses filling general education requirements for the Associate of Applied Science can be found on the Associate of Applied Science page.*



## WELDING TECHNOLOGY

*Certificate of Achievement*

**WNC Academic Division:** Technology

**Total Requirements:** 30 credits

Subject Requirements		18 Credits
WELD 211	Welding I	3
WELD 212B	Welding I Practice	2
WELD 221	Welding II	3
WELD 222B	Welding II Practice	2
WELD 250B	Welding Certification Preparation	6
Welding Elective		2

### General Education Requirements

English/Communications Requirements: Must include a writing course	6
Human Relations Requirement: Recommended: BUS 110B	3
Mathematics Requirement	3

*A list of all courses filling general education requirements for the Certificate of Achievement can be found on the Certificate of Achievement page.*

### WELDING TECHNOLOGY - Suggested Course Sequence

First Semester	Completed	Third Semester	Completed
BUS 107	3 <input type="checkbox"/>	DFT 100	3 <input type="checkbox"/>
Mathematics Course	3 <input type="checkbox"/>	Science Course	3 <input type="checkbox"/>
MTT 105B	3 <input type="checkbox"/>	WELD 231B	3 <input type="checkbox"/>
Science Course	3 <input type="checkbox"/>	WELD 232B	2 <input type="checkbox"/>
WELD 211	3 <input type="checkbox"/>	WELD 250B	3 <input type="checkbox"/>
WELD 212B	2 <input type="checkbox"/>	WELD 290B	2 <input type="checkbox"/>
Second Semester	Completed	Fourth Semester	Completed
BUS 108	3 <input type="checkbox"/>	BUS 110B	3 <input type="checkbox"/>
Humanities/Social Science Course	3 <input type="checkbox"/>	U.S./Nevada Constitutions	3 <input type="checkbox"/>
WELD 221	3 <input type="checkbox"/>	WELD 241B	3 <input type="checkbox"/>
WELD 222B	2 <input type="checkbox"/>	WELD 242B	2 <input type="checkbox"/>
WELD 224B	3 <input type="checkbox"/>	WELD 250B	3 <input type="checkbox"/>
		WELD 290B	2 <input type="checkbox"/>

## ASSOCIATE OF APPLIED SCIENCE - WELDING TECHNOLOGY

### Mission & Outcomes

**Mission:** The mission of the Associate of Applied Science degree in Welding Technology is to provide employment-related knowledge and skills necessary to succeed in the welding field.

**Student Learning Outcomes:** Students who complete an Associate of Applied Science in Welding Technology will be able to demonstrate:

- knowledge of the subject matter appropriate to the welding technology.
- Are able to do the following:
  - acquire skills and perform tasks necessary for employment for a career enhancement in the welding field
  - present themselves effectively to a potential employer
  - effective communication and computation skills appropriate to the welding field
  - utilize appropriate resources to remain current in the welding field

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## SPECIAL ACADEMIC PROGRAMS

### CERTIFICATION & LICENSING PREPARATION

Certification and licensing preparation programs are designed to prepare students to take state or other certified licensing exams. Topics can include real estate licensing, building inspecting, computer networking, and more.

*NOTE: While these course programs are designed to prepare students to take a licensing exam, the completion of these courses does not include the actual licensing exam and successful completion of the courses does not guarantee receiving the license or certification.*

- Construction Technology, Certified Inspector of Structures
- Customer Service
- Real Estate, Broker License
- Real Estate, Sales License
- Real Estate - Residential, Appraiser Apprentice License

### CONTINUING EDUCATION PROGRAMS

The college offers a number of programs and services through Continuing Education to help WNC students, graduates and employers. Services include:

### COMMUNITY EDUCATION

Community Education offers non-credit, self-supporting, classes that enrich the cultural, social, and recreational life of the community. These may include special interest courses, field trips and workshops. The department also sponsors College for Kids, an educational enrichment program to challenge youth.

Carson ..... 775-445-4268  
Fallon & Rural Centers ..... 775-423-5847  
Douglas ..... 775-782-2413

### NEW DRIVER TRAINING

#### CLASSROOM COURSE

New drivers can prepare for the challenges of driving (and driver license testing) in the Western Nevada College Driver Training Program. The non-credit course meets for 30 hours of classroom training, and is open to students ages 15 and over.

Call ..... 775-445-4458

**[www.wnc.edu/drivertraining/](http://www.wnc.edu/drivertraining/)**

### WORKFORCE DEVELOPMENT CENTER

The Workforce Development of Western Nevada College provides educational opportunities and training solutions for business, industries and government or non-profit agencies within its vast service area. Assessment, instruction and evaluation are essential components of WNC's programs topics include supervisory training, industrial safety and customer service. Education and training for credit or non-credit can be delivered on-site or at WNC campuses in Carson City, Fallon or Minden or at the instructional centers in Fernley, Hawthorne, Lovelock, Smith or Yerington.

Carson & Douglas ..... 775-445-4458  
Fallon ..... 775-423-5847

**[www.wnc.edu/wdc/](http://www.wnc.edu/wdc/)**

### CORRECTIONAL EDUCATION

WNC offers classes leading to the completion of degrees and certificate programs to incarcerated students housed in Nevada State Prison facilities within its service area. Courses leading to the Associate of General Studies degree, the Associate of Arts degree, various occupational certificates and degrees are conducted at the Nevada State Prison, Warm Springs Correctional Center, Northern Nevada Correctional Center, Lovelock Correctional Center and Silver Springs Correctional Center.

Call ..... 775-445-4282

### PUBLIC SAFETY TELECOMMUNICATOR

#### (9-1-1 Dispatch Training)

WNC offers a 12-credit, semester-long course each spring to prepare individuals to enter the rewarding field of 9-1-1 dispatching. They must be 18 years old, possess a high school diploma or equivalent, and be able to type 40 WPM corrected. Forty hours of internship in a dispatch center is also required.

Call ..... 775-445-4408

### TEACHER EDUCATION PREPARATION

WNC offers introductory courses in teacher education that can transfer to universities or colleges that offer a bachelor's degree in education including the University of Nevada, Reno and/or Nevada State College. These courses offer students a chance to prepare for a career in education. Through a well-established partnership with local schools, field experiences are an integral and early part of all teacher preparation courses. These courses can also be used to gain a substitute license or by paraprofessionals needing to qualify under "No Child Left Behind" legislation.

Students can transfer to NSC and take classes at WNC campuses and online to earn a bachelor's degree and certification in elementary education.

They may also transfer to UNR to pursue a bachelor's degree and certification in:

- Elementary Education
- Special Education/Dual (SPED/Elem)
- Secondary Education (Middle/High School)

### WESTERN NEVADA STATE PEACE OFFICER ACADEMY

WNC offers a 30-week, 33.5 credit course of study to prepare students for careers in law enforcement. The academy begins each January and meets all Nevada and POST certification requirements.

Graduates will enhance their employability in attaining positions that require Category I, II or III peace officer certifications for police and sheriffs, investigators, parole and probation officers, bailiffs and jailers.

Call ..... 775-445-4408

**[www.wnc.edu/post/](http://www.wnc.edu/post/)**

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#### NON-DISCRIMINATION NOTICE

WNC is guided by the principle that there shall be no difference in the treatment of persons because of race, religion, color, age, sex, including a pregnancy-related condition, sexual orientation, military status or military obligations, disability, including veterans with service-connected disabilities, or national origin, and that equal opportunity and access to facilities shall be available to all. Similarly, there shall be no difference in the treatment of persons who file charges of discrimination, participate in a discrimination proceeding, or otherwise oppose discrimination. It is our policy to comply fully with the non-discrimination provision of all state and federal regulations with regard to recruitment, admission, financial aid, activities, hiring, promotions, training, terminations, benefits and compensation. Inquiries: 775-445-4237



WNC CARSON CITY  
2201 West College Parkway  
Carson City, NV 89703  
775-445-3000

WNC DOUGLAS  
1680 Bently Parkway South  
Minden, NV 89423  
775-782-2413

WNC FALLON  
160 Campus Way  
Fallon, NV 89406  
775-423-7565



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